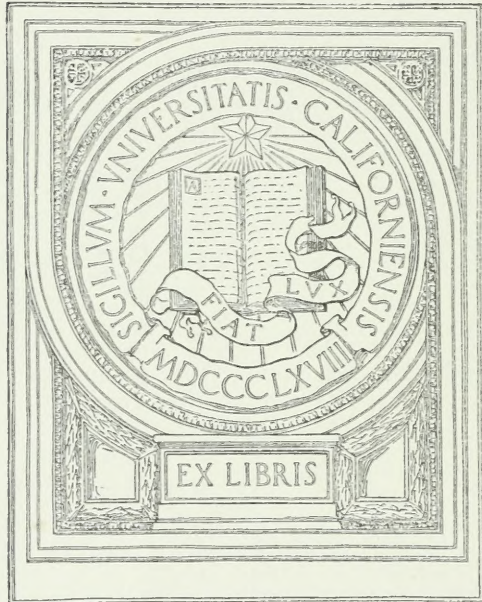
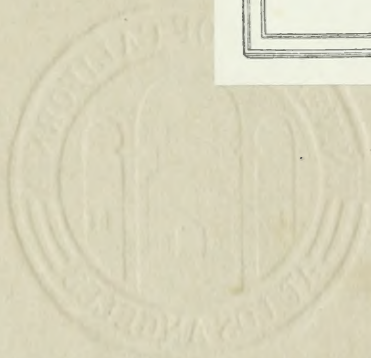
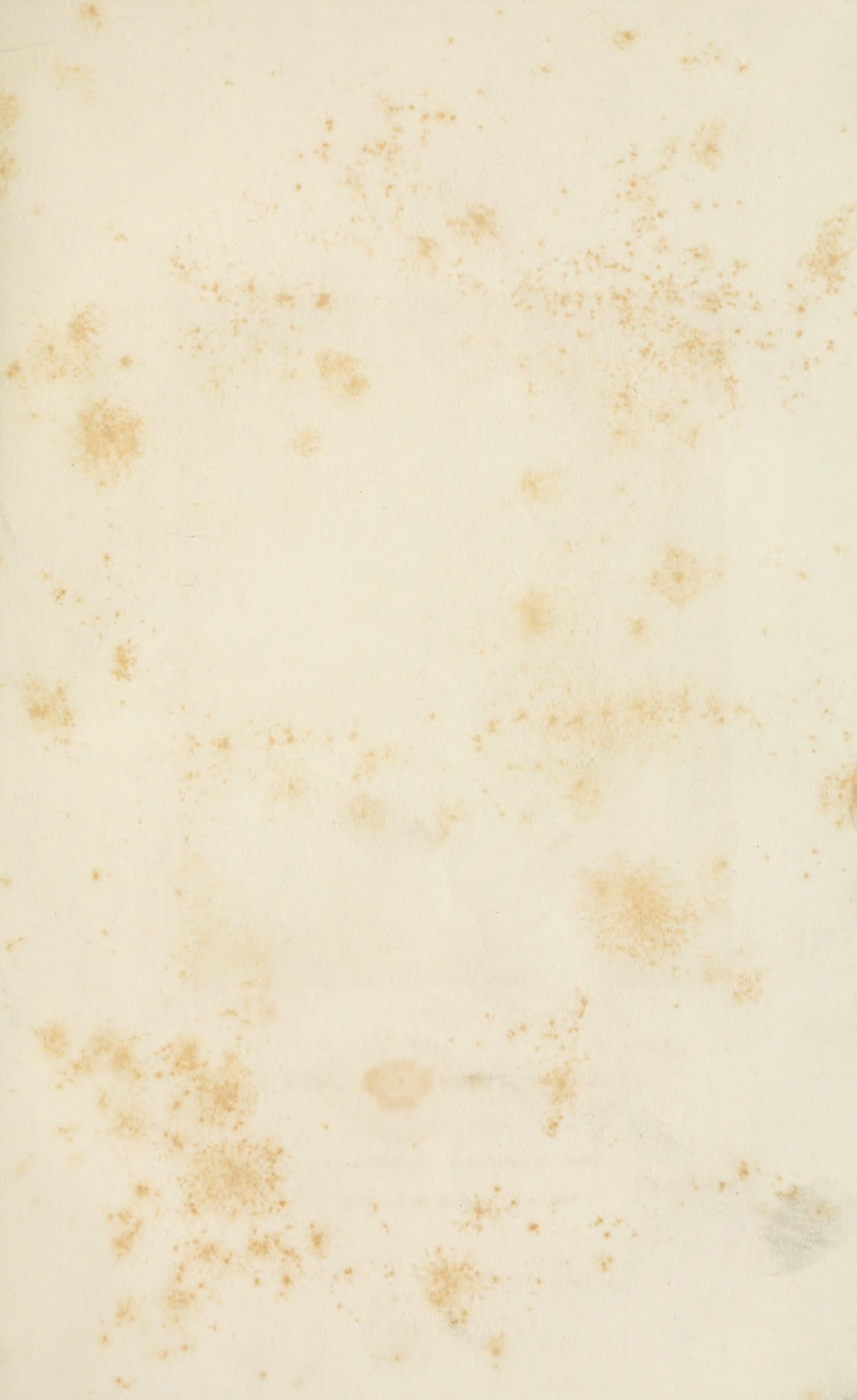


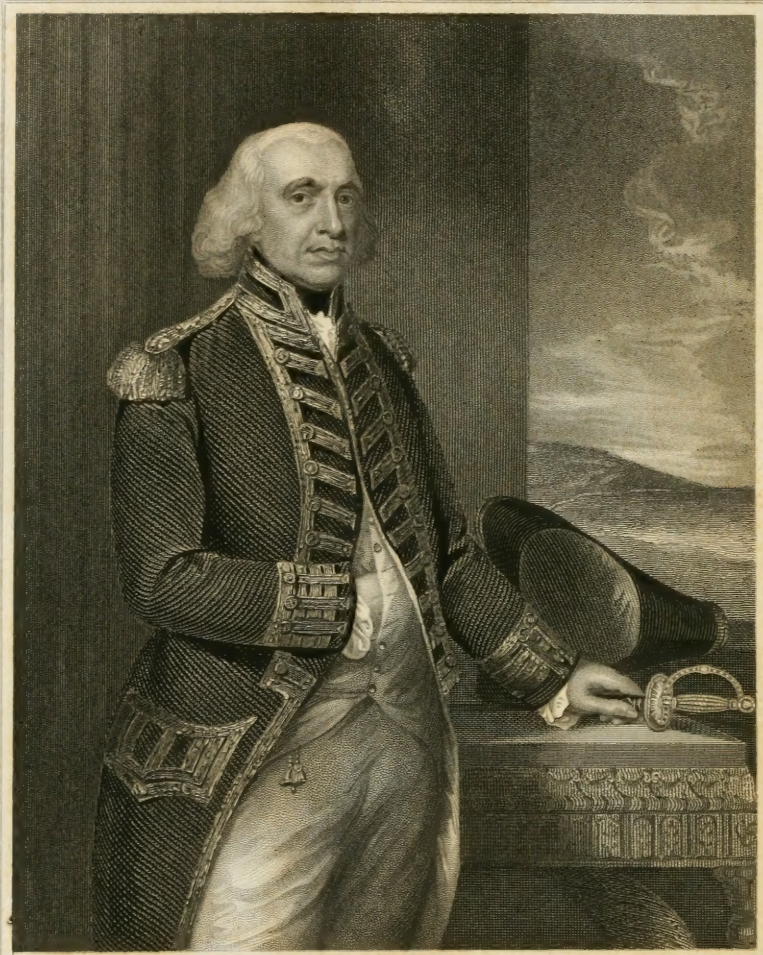
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LOS ANGELES



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Engraved by H. Robinson.

RICHARD, FIRST EARL HOWE.

OB. 1799.

FROM THE ORIGINAL OF GAINSBOROUGH IN

THE TRINITY HOUSE, LONDON.

DEDICATED BY



AUTHORITY TO

Her Most Gracious

Majesty the Queen.

A U S T R A L I A :

COMPRISING

NEW SOUTH WALES;

VICTORIA OR PORT PHILIP; SOUTH AUSTRALIA;

AND

WESTERN AUSTRALIA:

THEIR

History, Topography, Condition, Resources, Statistics,

GOLD DISCOVERIES, MINES OF COPPER, LEAD,

ETC., ETC.;

GENERAL INFORMATION FOR EMIGRANTS, MERCHANTS,
MANUFACTURERS, AND SHIPOWNERS;

WITH THE

LATEST OFFICIAL INTELLIGENCE, PUBLISHED UNDER THE AUTHORITY OF
HER MAJESTY'S GOVERNMENT.

BY R. MONTGOMERY MARTIN, ESQ.,

LATE TREASURER TO THE QUEEN AT HONG KONG, AND MEMBER OF HER MAJESTY'S LEGISLATIVE COUNCIL IN CHINA.

PRINTED AND PUBLISHED BY JOHN TALLIS AND COMPANY,
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Dedication.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MADAM,—

AMONG your Majesty's varied and valuable Possessions in every quarter of the globe, none promise to exercise greater influence on the condition of the British Nation in the Eastern, as well as in the Western Hemisphere, than the interesting and important settlements formed from time to time on the coast-line of the Island-continent of AUSTRALIA.

The singular chain of circumstances which led to the gradual annexation of this extensive region,—its almost boundless pastoral and agricultural resources, and its rapid numerical, commercial, political, and religious progress, alone suffice to render the history of this distant land one of the leading features of the present century. But when, in the middle of the year 1851, it became known that the very surface of this favoured country was thickly strewn with gold, a tide of voluntary emigration took place—unparalleled in the annals of colonization—which has already produced strange and marvellous results. To record some of these, and to place before the British Public a picture of the present condition of their enterprising fellow-subjects in Australia, is the immediate object of the writer,—who, in so doing, hopes to illustrate, however feebly, the remarkable manner in which the Ruler of Nations has vouchsafed to bestow upon England a new and unlooked-for source of wealth and power, at a period of emergency, as

DEDICATION.

if in Divine recognition of the national efforts which, in the establishment of a penal settlement at the Antipodes (notwithstanding many defects and errors in the details of the scheme), were then directed, almost for the first time, to the reformation, rather than to the punishment, of criminals.

This sound, because truly Christian, principle has been of late years increasingly developed, and the cordial interest evinced by your Majesty, and His Royal Highness Prince Albert, in every project which, by conducing to improve the moral and material condition of the mass of the People, increase their comforts, and elevate their tastes and habits—tends to ward off the besetting temptations peculiar to their state—is in itself a sufficient assurance that your Majesty cannot but regard with peculiar solicitude the progress of a country once a Land of Exile, but now thronged to as a Land of Promise by thousands of free and loyal British subjects.

With deep respect, I beg to subscribe myself,

Your MAJESTY'S dutiful Subject,

R. M. MARTIN.

KENSINGTON, *April*, 1853.

Synopsis of the Work.

- I.—Discovery of Australia—Exploration by Dutch, Spanish, French, and English navigators, and by the Inland travellers, Wentworth, Evans, Oxley, Cunningham, Hume, Mitchell, Sturt, Eyre, Grey, Leichardt, Kennedy, Strzelecki, King, Stokes, Russell, Jukes, Irby, Gregory, and others.
- II.—Physical Features—Area, Coast-line, Bays, Havens, Rivers, and Lakes,—Mountains, Promontories, and Headlands,—Inland discoveries.
- III.—Geological, Mineral, and Coal formations, Volcanic and Diluvian agency,—Soil, Climate, Seasons,—Animal and Vegetable Kingdoms.
- IV.—NEW SOUTH WALES, VICTORIA or Port Philip, SOUTH AUSTRALIA, and Swan River or WESTERN AUSTRALIA—their separate Origin, Rise, Progress, former Convict system, past history and present state as British Colonies.
- V.—Territorial Divisions into Counties, Cities, Towns, and Villages,—Aspect of the Country,—Peculiarities of each District, and remarkable adaptation for the abodes of Anglo-Saxon and Celtic races,—the Aborigines, their character, appearance, customs, &c.
- VI.—Population—its distribution, moral condition, state of Religion, Education and Crime, form of Government, Taxation, and Tariff,—Expenditure,—Banks, Monetary System, Joint-stock Associations, and Public Companies,—Imports and Exports, Shipping, Staple Products,—Agriculture, Pasture, number of Sheep, Horses, and Horned Cattle,—Manufactures, Copper-

SYNOPSIS OF THE WORK.

mines, and Fisheries,—Waste Land, and its price,—rates of Wages and cost of Provisions,—modes of Settlement, choice of Localities, and Practical Suggestions to Emigrants

VII.—Recent discoveries of Gold, — extraordinary quantity procured, and mode of obtainment—its diffusion over a large area,—Mineralogical character of the Country,—Probable diffusion of Silver and other valuable Metals,—Beneficial effect on the Colonies and on England,—Consequences of a Navigable Ship Canal through the Isthmus of Panama on the Commerce, Navigation, and Peace of the World; and ultimate influence of Australia on British India, on China, and generally throughout the Eastern Hemisphere.

Preface.

CIRCUMSTANCES have done more for England than principles: in other words, Divine Providence has graciously over-ruled the errors of our national policy; and as if to reward feeble, but well-intended efforts, has enabled us to reap an abundant harvest from seed sown, as it were, at a venture. Such at least would seem to be the only reasonable explanation of the present condition of the group of colonies now under consideration.

Although portions of Australia were visited, and its coast-line partially explored, by the leading maritime nations of Europe, in the seventeenth and eighteenth centuries, they formed no colony there; England especially manifested little interest on the subject; and even the cursory examination by Captain Cook, of the eastern shore, in 1770, constituted no part of the object for which this celebrated voyage to the South Seas was undertaken. And when, towards the close of the eighteenth century, the formation of a penal station at Botany Bay was decided upon, it was not in pursuance of any defined plan of colonization; doubts indeed were entertained whether the country was capable of supporting a large number of prisoners, and events seemed to justify such fears; for, at intervals, up to the beginning of the nineteenth century, the convicts were, on several occasions, reduced to the verge of starvation; and it was even seriously contemplated to abandon New South Wales, and remove the whole establishment to a more fertile part of the globe. Long after the settlers raised sufficient food for their own support, the place was viewed merely as a great penitentiary; and Governor Macquarrie used to say it was only fit for those who had been, or those who deserved to be, transported. Even when the capabilities of the settlement began to be better understood, and free emigrants were attracted thither, successive Secretaries of State objected to its further extension; and individual enterprise, not national policy, prompted the gradual and distinct measures by which the whole of Australia has been eventually engrafted on the British Empire. Nor is it only in the mere annexation of this vast region that the operations of a superintending Providence have been clearly manifested: the same influence may be traced in almost every step that has been taken, from the day on which the Union Jack first waved on the shores of Sydney Cove to the present period.

The want of animal food; the distance of any land from whence it could be readily obtained; and the general ignorance of the convicts and their guards of agriculture, necessitated an early attention to pastoral pursuits, whereby the foundation was laid for the immense flocks and herds which have proved so safe a basis for the numerical increase and growing commerce of the settlement. When the colonists were straitened for new pasturage, the Blue Mountain or coast-line ridge, which seemed to form an almost impenetrable barrier, was scaled, and the Bathurst, Wellington, and adjoining Downs, rewarded the courage and perseverance of the explorers.

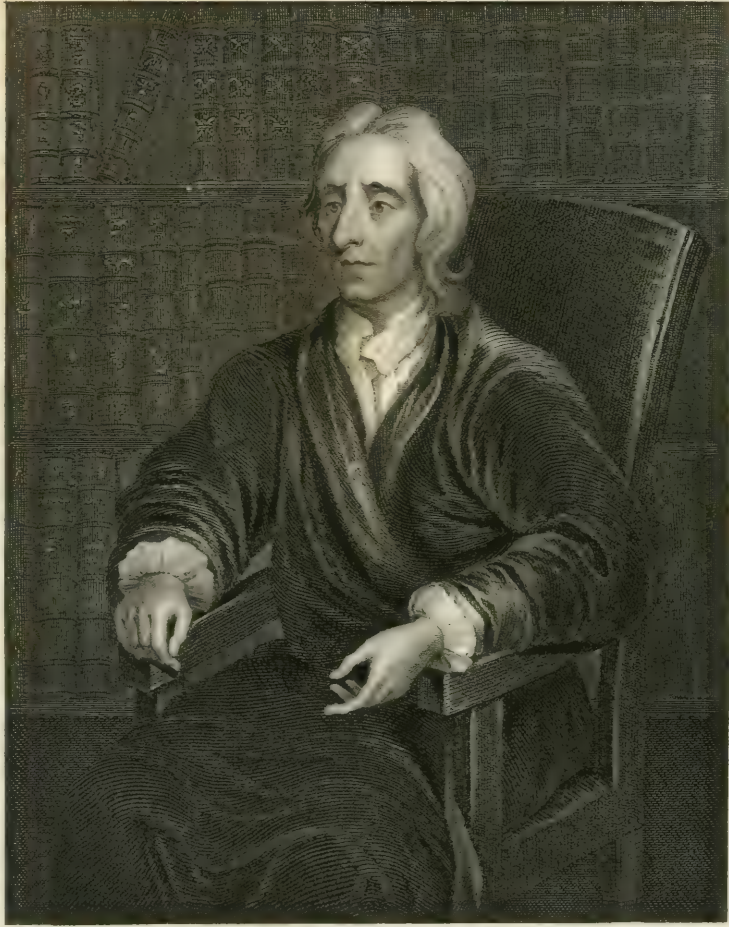
There the fine-woolled sheep which the apathetic Dutch rejected at the Cape of Good Hope, multiplied with extraordinary rapidity, on a nutritious and perennial herbage; and the foresight of an English gentleman (John M'Arthur), who narrowly escaped being hanged for alleged treason, but whose patriotism and public spirit deserved a coronet, by careful attention to the introduction of improved Merino and Saxon breeds, laid the foundation of the modern "Golden Fleece."

By granting local pardons to well-conducted prisoners, to whom small farms, seed-corn, and stock were furnished; by issuing "tickets of leave" to others, who were thus enabled to work on their own account; by inducing retired officers from the army and navy, and other respectable settlers, to make Australia their home, on receiving considerable tracts of fine land; the preparatory stage of a healthy colonial existence was quickly passed, and the varied resources derivable from a rich soil and genial clime became manifest.

The primeval forest was felled, the virgin earth yielded abundant increase, the aborigines few, widely scattered, and in the lowest state of barbarism, offered no resistance to the spread of population; villages arose in the wilderness, which good roads, constructed by convict labour, soon tended to convert into townships; well-filled barns, extensive sheep-pens, and large stock-yards delighted the eye; ships crowded the noble harbour of Sydney, and those who a few short years before saw gaunt famine staring them in the face, now beheld plenty rewarding all who, whatever their antecedents had been, had learned to regard industry and probity as the duties of life.

These extraordinary results, but especially the wonderful and almost unlooked for reformation which had taken place among a large part of the convicts, awakened considerable interest in the British public, and overcame the habitual indifference with which events occurring at the other end of the earth, were, while all communication was scanty and imperfect, not unnaturally regarded.

At this period the difficulties of forming new settlements on the coast-line were materially diminished by the prosperity of New South Wales; and almost, despite the wishes, certainly comparatively unaided by government, Port Philip (Victoria), South Australia, and other localities, were taken possession of by enterprising and intelligent adventurers, and thousands of men and women of unspotted character migrated from the United Kingdom, and sought in Australia the competence or distinction they could not reasonably expect to obtain in England. By this means the population was both increased and leavened; and having passed the preliminary stage in which convict labour proves beneficial, became anxious for the discontinuance of its importation, which was at length conceded, and the transportation of criminals to New South Wales finally ceased in 1840. Since that time the prisoners previously introduced have gradually obtained their freedom by pardon or by servitude, and become absorbed among the rest of the inhabitants. The progress of the Australian colonies, however, at one period received a severe check, for while agriculture and commerce were there advancing with rapid strides, impracticable but plausible theories prevailed in the Imperial Legislature over the dictates of experience and sound principle; and, contrary to the wishes of the colonists at New South Wales and Victoria (Port Philip), and to the opinion of the Governor, Sir Richard Bourke, a high was substituted for a moderate price for crown lands, and consequently the man whose sole property was his labour, could no longer



JOHN LOCKE.

OB. 1704.

FROM THE ORIGINAL DRAWING IN THE PALE

CHRIST CHURCH, OXFORD.

reasonably expect, by diligence and thrift, to become eventually the proprietor of the soil which he tilled. The stream of immigration was by this ill-judged policy in great measure diverted from the land, where its fertilizing influence was so beneficial; and excessive speculation being followed by an almost complete cessation of all land-sales, ended in a colonial "panic," and a general and deplorable depreciation of property.

But out of a serious error good was educed; there being no buyers at the 'sufficient price,' which, though never defined, would yet appear to have invariably signified an extravagantly high relative rate, it was deemed expedient to lease cattle-runs of great extent, for short stated periods, at almost nominal rents. By this unavoidable compromise, the fallacies of the system which necessitated it were clearly proved; for while the declared object of that system,—concentration, was intended to be accomplished by rendering land so dear that it could be purchased only in very limited portions, if at all, by small capitalists, who it was supposed would consequently be compelled to congregate together, its actual effect was the very reverse; nor, indeed, is it easy to conceive any measure, better calculated, under the peculiar circumstances of the country, to promote dispersion, by inducing enterprising and energetic men to renounce in despair the acquisition and improvement of farms of their own, and betake themselves with their herds and flocks to the vast plains, whose abundant pasturage they well knew the local authorities could not but grant them permission to enjoy on easy terms, having no executive force adequate to their expulsion.

The profits of sheep-farming at length became noised abroad in the United Kingdom, and soon attracted thence an educated class with some capital, who having invested it in the purchase of superior breeds of cattle and sheep, took possession, as "squatters," of the grassy wastes of the interior, where the foot of civilized man, or the hoof of domesticated animals, had never before trodden.

On wide-spread downs, in each valley, beside every rivulet, and on all available spots, stock-stations were formed by men of gentle blood, many of whom had graduated at Oxford and Cambridge, and by hundreds of bold and hardy spirits, who preferred the rough bush-life of sunny Australia with its numerous discomforts, but present independence, and prospects of speedy affluence, to an inglorious existence and hard struggle to maintain at home the station in which they had been born and nurtured. Thus arose a new race of citizens, who must eventually exercise considerable influence in their adopted country.

Their employment did not, however, continue so profitable as it had at first been, or as it afterwards again became. An unlimited range of fresh herbage caused the depasturing animals to multiply everywhere with extraordinary rapidity, while at the same time a commercial depression in Europe occasioned a large reduction in the value of wool. The price of sheep fell to one or two shillings per head, and horned cattle in proportion. The best fresh meat was from a halfpenny to a penny per pound, and so abundant as to be scarcely saleable at any price. This very excess suggested a partial remedy; vats were constructed wherein entire carcasses of fat animals were boiled down, and tallow of excellent quality, and in considerable quantities, was added to the staple exports of the colonies.

But this resource alone was insufficient for the effectual relief of the settlers, and could not prevent many mercantile failures, and much distress; the high price of land still precluded the immigration of thousands of small capitalists, whose steps were meanwhile

powerfully attracted to the United States, where land was sold at the rate of 5*s.* per acre, and where a comparatively poor man with a large family could soon become a comfortable farmer, and bestow upon his children the means of acquiring an honest and improving livelihood. Political discontent, which frequently accompanies financial embarrassment, added to the present trials despondency as to the future prosperity of the Australian colonies; many persons quitted their shores, and capitalists considered that as a site for the profitable employment of accumulated wealth, their items of production were few, and their value overrated.

The truth was, that of their numerous resources only the pastoral had yet been fairly developed; the Burra-Burra, and other rich copper mines of South Australia, opened up a new source of profit; but the vast agricultural capabilities of all the colonies were yet as a sealed book, from the want of labourers to till the fertile soil. At the same time the United Kingdom was burdened with a redundant population, occasioning enormous parochial assessments for the support of the able-bodied poor, and grievously increasing the national taxation, that necessitated the onerous and harassing fiscal system, under which eight and-twenty million sterling were annually raised to pay the interest of a debt of eight hundred million sterling, contracted mainly during the late war with France, in a depreciated paper-money, and which it was decreed in 1819, should be paid in gold at the rate of £3 17*s.* 10½*d.* per oz., although it was then supposed there was not that amount of the precious metal *on* or *beneath* the surface of the globe. This arbitrary enactment benefited creditors, both public and private, at the expense of debtors. Thus loans, mortgages, or other pecuniary liabilities, contracted in paper notes, under every variety of depressing circumstances, were suddenly fixed like a millstone to the necks of the unfortunate borrowers, including of course the great bulk of the nation, whose burdens were doubled while their means were halved.

These social evils were aggravated by a sudden and total alteration in the commercial policy of the empire, by the free admission of foreign commodities to compete with home productions, although the circulating medium which regulated the demand as well as controlled the supplying power of the domestic manufacturer, was fettered by the restrictive bullion law of 1819, silver being still merely a legal tender to the amount of 40*s.*, bank notes issuable only in proportion to the quantity of the precious metal in the coffers of the several banks, to which another restrictive law of 1844 virtually granted a monopoly of paper issues throughout the United Kingdom. The long continuance of such an incongruous combination was impossible, the more so as the United States, France, Germany, and other countries, declined to follow our example, and reduce their protective or high revenue tariffs; either the free trade measures, or the bullion laws of 1819, and the banking regulations of 1844, must have been repealed. Unless the declared standard of value (gold) could be obtained in hitherto unheard-of quantities, it was utterly impossible for Great Britain to compete with the comparatively untaxed nations of the world; unless her landed proprietary received a fair rental by means of moderate agricultural profits, the basis on which her financial system and political constitution were formed must be changed; high taxation and low wages could not long co-exist; a scarcity of money was incompatible with remunerative employment, and could not but largely increase the growing difficulties attendant on the maintenance of public and private credit.

The crisis was of unparalleled magnitude, and well calculated to alarm even the leaders of the Free Trade party in and out of Parliament, while it justified the forebodings of their opponents, who pronounced the change too rapid and sweeping for an old established commercial community, and considered that the advantage of untaxed imports, ought as a preliminary measure, to have been first extended exclusively to British Colonies; but despondency gave way to hope, the fears of those who predicted danger to the state were allayed, and a bright gleam of joy spread over the land on learning—first, the wonderful discovery of gold in California, and next that the slopes of the Blue Mountain range, and the ravines of the Australian Cordillera, surpassed, in auriferous deposits, the valley of the Sacramento, and the forks of the Sierra Nevada. It was seen, as if by magic, that the country for hundreds of miles was thickly strewn with gold, that the glittering ore was even scattered in masses, some of one hundred-weight, over the sheep downs, and that the very roads had been made, and the parish bridges built with stones in which the much-coveted metal was largely and visibly imbedded. Tens of thousands hastened to the land of promise; gold to the value of several million sterling has been collected during the past year; relief to some extent has already been afforded to the trading classes in the mother-country, and Australia is now basking in the sunshine of prosperity. Can a revelation so astounding as this be deemed accidental? or are there in moral, any more than in material existence, effects without definite causes? To minds accustomed to acknowledge and trace the workings of a special Providence, the progress of our Australian Colonies, from their very commencement up to this great epoch in the history of the whole civilized world, must ever furnish a most interesting field for thought and investigation; nor will those who can duly appreciate the immense benefit which England is in various ways now receiving from Australia, venture to disregard or question the grave responsibility connected therewith. The gold discovery, viewed apart from its remarkable effect on the nation which it more immediately concerns, is in itself a marvellous thing; and, probably, could the daring adventurers of the fifteenth and sixteenth centuries, who ploughed unknown seas; or the alchemists, who spent laborious and ascetic lives, in searching for nature's hidden treasures, or seeking by half-chemical, half-mystical, but all delusive schemes, to obtain abundant wealth for themselves or their patrons, be empowered to revisit their former abode, nothing would more excite their wonder than the fact, that the precious metal for which they had so yearned and striven, was now daily and hourly gathered in larger or smaller quantities, by men, women, and children; the pursuit being, however, attended even to the present moment with a degree of uncertainty which often sets skill and industry at defiance, and still renders gold-seeking somewhat of a lottery; if indeed that word can be justly applied to any system in which gains, whether great or small, are procured by honest labour, and where no man is "lucky" at the expense of another.

Besides its uncertainty, a yet more peculiar characteristic remains as marked as ever, and has tended, in the minds of the more thoughtful and religious portion of the community, to lessen the satisfaction with which the announcement of the recent discoveries has been received. Neither Christians nor moralists can forget that in all ages and in every country, the arch enemy of mankind has found the love of money the most potent element of seduction, and by its influence has induced millions to barter peace here and happiness hereafter, in its acquirement; their eager cravings being first inflamed

by fallacious expectations of the power, influence, or luxuries, obtainable through its means, and often ending in that most strange infatuation, a desire for the ore itself, not as a means but as an end. The multitudes of both black and white victims whose lives have been worked out in gloomy mines, to supply food for the insatiable avarice of a comparatively few mighty tyrants, have associated in the minds of many good men the idea of gold with that of blood and covetousness; but this connexion is now scarcely reasonable, since it has pleased the Almighty disposer of events to reveal its extensive distribution under circumstances which permit of its being reaped abundantly, only by free and willing labourers. The treasure thus wonderfully provided at the proper moment to meet the exigencies of the present age, is, like every other power, fraught with blessing in its use, and with a curse if abused. If well directed, this flow of gold may circulate as it were through the veins of the British empire, remedy the drain occasioned by costly wars, strengthen the enterprise of the people, and produce a sound financial condition; but it is unhappily possible that these new and unlooked-for resources may be criminally lavished in the very same way by which we had before become fettered and weakened. That the gold so much needed by Britain and her colonies, and the life and energy more needed still, should be squandered in attempting the expatriation or extermination of the Kafirs, or in aggressive Indian wars, when nothing but judicious government and a defensive instead of offensive system is really required for the maintenance of peace, is nothing less than a provoking of Providence, which perhaps would have long since brought down a fearful doom, but for the utter ignorance of the true state of the case which prevails among the mass of the people, the difficulties which surround their rulers, and the hearty efforts made in the right path, whenever that path is clearly recognised.

To return from this digression,—our imperfect knowledge respecting the extensive distribution of gold, and its probable consequences, leaves wide room for conjecture. Whether the precious metal may not yet be discovered in large masses, either in mountain crevices, or deeply imbedded in the bowels of the earth?—what result its obtainment in abundance similar to that of copper ore, would have upon the value of property?—whether the National Debt, contracted in depreciated paper, would then be paid off in depreciated gold?—whether European nations may not eventually be obliged to adopt another monetary standard, or abandoning coin, resort to the system practised by the Chinese since the days of Confucius, of making lumps or bars of the precious metals, of varying size but stated fineness, the medium of exchange; or as in Russia, giving to platina the place so long filled by the “yellow dust?”—all these are at present mere speculative inquiries, but no man dares venture to predict how long they may remain so. Any immediate superfluity appears, however, highly improbable; for when we consider the intimate connexion between a restricted currency and a suffering population, and recollect the millions of European labourers half-fed, badly clothed, and worse lodged, and the immense tracts of land requiring tillage and drainage, the canals, railroads, and other public works, that want of funds, not labour, prevents from being undertaken;—there would seem little reason to fear that though the annual aggregate yield of gold from both Australia and California, estimated at twenty to thirty million, should even be increased, any material alterations would be thereby necessitated in the fiscal systems of European nations by the augmenting money value of private property, for the next ten years at least.

The present is a critical period,—that ever must be so which confers on a nation or

an individual an object coveted with ardent but almost hopeless desire. The boon has been bestowed in so wonderful a manner, that it must of necessity be received in the first instance chiefly by the poorest class, though eventually its influence will become general. It is unquestionably a mighty power for good or for evil; but it would seem to carry with it now, in its very diffusion, a moral not to be mistaken or overlooked; teaching that, whether trodden ignorantly under foot, or lying hidden and hoarded in the coffers of the miser, the purest gold is worthless as the veriest dross. Rightly employed, its usefulness, though simply as an admirable and (if sufficient in quantity) almost unexceptionable representative of value is incalculable: for what printing is to letters,—the compass to navigation,—steam to locomotion,—electricity to the spread of intelligence,—an efficient circulating medium is to commerce and colonization.

For five-and-twenty years I have feebly but unceasingly advocated the still unappreciated importance of our Colonies, and preached colonization as the safety-valve of the British Empire. I have lived long enough to see views and suggestions once deemed theoretical, carried into successful operation; and ideas, then termed wild fancies, developed into sober realities. Formerly, indeed, the signs of the times were less clearly manifested than at present; but their character was essentially the same. There was then, as now, an increasingly dense population in England and Ireland, comprising an aristocratic class, sometimes, though by no means invariably wealthy, but whose parks, pleasure-grounds, and preserves, frequently enclose an amount of fallow-land which can ill be spared from the agricultural requirements of the country; a millionaire class, composed of persons who have attained their position by fortunate speculation; a middle class, containing the comparatively few who have inherited a degree of affluence, or at least an easy competence, or earned such by the judicious and successful application of earlier years; and the many, who, whether their positions be fixed in the counting-house of the merchant or banker, or behind the tradesman's counter, are struggling with difficulties known only to themselves; but besides these, remains a class far larger than all the foregoing put together—constituting the base of the social pyramid—comprising, in fact, the great mass of the people—living from hand to mouth, dependent on the scanty and precarious wages derived from daily toil, and without a prospect for old age, or in the event of sickness but eleemosynary aid in some form, probably that of the parish poor-house or a public hospital. That there are these institutions for the succour of the helpless is indeed the glory of England; but that they should be so extensively needed is a heavy misfortune, occasioned, or at least aggravated by the superabundant population which, joined to a restricted currency, like an incubus, weighs down the energies of the nation, and has made human labour obtainable for the cost of the lowest elements of mere animal existence.

Such a state of things is inevitably fraught with danger to the established order of society, even under the most just and liberal constitution, and the spread of knowledge among the lower classes rather increases than lessens the danger. Education in its true sense, that is, the inculcation of sound practical principles, is a priceless boon which can never produce any save beneficial results; but mere instruction in reading and writing, or in the higher branches of study, whether conferred upon the child of royalty or of the most abject poverty, is in itself simply a means which may be used either for a good or a bad end. Heavy indeed is the responsibility of those who cultivate the intellect, whether of young or old, without striving to direct the affections also. But even when this joint-

effort is conscientiously made, it must, we know, and alas! often does fail; and certain it is that worldly teaching takes root readily in the soil where the good seed perishes. The probable effect of a class numerically superior, becoming imbued with a sense of their actual condition, cannot but be alarming, unless they were at the same time sedulously trained in those Christian precepts which, if followed out, must equally prevent external wars or internal revolutions. From this danger a way of escape is open, and hundreds of thousands, drawn by an unlooked-for attraction, instead of struggling for a hard-earned pittance in the crowded labour-market (whether physical or intellectual) of the United Kingdom, are acquiring an improving livelihood among their own countrymen, in a wider and more advantageous sphere of action, distant it is true from the spot on which they were born, but yearly brought nearer to England by rapid and frequent communication.

Upwards of half a million of the British race are now located in Australia: they possess in abundance all the necessaries, most of the comforts, and many of the luxuries of life. The four colonies as yet only cover a limited portion of the great Island-Continent, but they are so richly gifted with all the requisites for the support of a large population, that it may, without exaggeration, be asserted that they could beneficially receive annually, for the next twenty years, at least one hundred thousand of the population of the British Isles.

Abundant labour would, without doubt, have a most beneficial effect upon Australia, its millions of acres of rich arable land might then be tilled; its vast and ever-verdant pastures covered with myriads of sheep and horned cattle, adequate to the supply of Europe, with whatever may be in demand of wool, hides, and animal food; its apparently inexhaustible gold, copper, and other mines extensively worked, and the mystery of its still unknown interior fully revealed.

With regard, however, to the parent state, a fear is expressed that injury may accrue from an increasing rate of emigration, and that, to use a popular phrase, "the steam is being let off too fast;" the facts stated in the following tables afford, perhaps, the most satisfactory reply that can be offered to these natural apprehensions:—

Emigration from the United Kingdom, since 1815.

Year.	No.	Year.	No.	Year.	No.	Year.	No.	Year.	No.	Year.	No.	Year.	No.	Year.	No.
1815	2,081	1820	25,729	1825	14,891	1830	56,907	1835	44,478	1840	90,743	1845	93,501	1850	280,849
1816	12,510	1821	18,297	1826	20,900	1831	83,160	1836	75,417	1841	118,592	1846	129,851	1851	335,966
1817	20,634	1822	20,429	1827	28,003	1832	103,140	1837	72,034	1842	128,344	1847	258,270	1852	368,764
1818	27,787	1823	16,550	1828	26,092	1833	62,527	1838	33,222	1843	57,212	1848	248,099		
1819	34,787	1824	14,025	1829	31,198	1834	76,222	1839	62,207	1844	70,686	1849	299,498	Total.	3,463,292

Note.—During this period of thirty-eight years the total number of emigrants has been 3,463,292, exclusive of 2,986 who proceeded to Australia between the years 1821 and 1825, not recorded in the Custom House returns. The annual average for the entire period was 91,217. Of the whole emigrants 2,064,574 went to the United States, 1,036,717 to British North America, 319,365 to Australia, Van Diemen's Land, and New Zealand, and 51,921 to various other places.

Progressive increase of Population during the same period.

Divisions.	1811.	1821.	1831.	1841.	1851.
England	9,538,827	11,261,437	13,091,005	14,995,138	16,918,513
Wales	611,788	717,438	806,182	911,603	999,198
Scotland	1,805,688	2,093,456	2,365,114	2,620,184	2,888,742
Ireland	5,937,856	6,801,827	7,767,401	8,175,124	6,515,794
Total	17,894,159	20,784,158	24,029,702	26,782,149	27,322,247

In 1811 the population of the United Kingdom was (allowing for an imperfect census of Ireland) about 18,000,000; at present it may be stated, in round numbers, at about 27,500,000, showing a difference, in forty years, of 9,500,000; if to this be added the number who have emigrated during this period, say 3,500,000, we have an aggregate increase of 13,000,000, which, for the entire forty years, would give a rate of 325,000 per annum.

The increase at present may be taken at $1\frac{1}{2}$ per cent. per annum, which would give a yearly augmentation of about 400,000; supposing therefore the whole of this number emigrated, there would still be a population too dense for these islands, unless there were a considerable expansion of the currency and a very large reduction of taxation.

Density of Population to the Square Mile.

Details.	England.	Wales.	Ireland.	Scotland.	Total.
Area in square miles	50,387	7,425	32,512	28,896	119,219
Population in June, 1851	16,918,513	999,198	6,515,794	2,888,742	27,322,247
Mouths to each square mile . . .	336	134	200	100	229
Arable land in square miles . . .	17,411		8,420	3,896	29,727
Mouths to arable surface	971		773	741	919

This density of inhabitants, in proportion to the means of raising food, is unequalled by a similar population and territory in any other part of the globe. China, on an area of 1,297,999 square miles, has a population of 367,632,907, or 283 mouths to each square mile. Even on the delta and banks of its great rivers, where the whole soil is a rich alluvium, yielding at least two crops of food a-year, the density ranges only from 500 to 700 mouths to each square mile. But if the United Kingdom be compared with several other European countries, the density of our island territory will be more manifest: in round numbers, and according to the best approximative estimates of present population, the number of mouths to each square mile are, in Belgium, 397 (where, of 12,569 square miles of area, 10,506 square miles is arable surface); Holland Proper, 245 (where the whole country is cultivated like a garden); Saxony, 295; Northern Italy, 200, Southern Italy, 180; France, 186; Switzerland, 170; Bavaria, 158; Prussia, 156; Hungary Proper, 136; Hanover, 135; Portugal, 130; Spain, 88; Denmark, 70; Wallachia, Moldavia, and Servia, 69; Turkey Proper, 56; Greece, 55; Russia in Europe, 30; Sweden, 20; Norway, 13. Estimating the entire area of Europe at 3,500,000 square miles, and the present population at 350,000,000, there are 100 mouths to each square mile of surface. The area of Australia is about 2,700,000 square miles, on which there are about half a million Europeans, or European descended inhabitants. Supposing that only one-half the superficies be capable of sustaining human life, there is room on that great island for about one hundred million inhabitants, at the rate of 74 to each of the 1,350,000 square miles of available area.

But notwithstanding the large emigration that has taken place from the United Kingdom, amounting, between January 1841, and December 1852, to 2,389,630; there is as yet little sensible diminution in the pauperism of England. By an official return laid before the House of Commons by the Poor Law Commissioners, 17th February, 1853 (No. 135), it appears that there were, in 608 Unions, in January last, 799,443 paupers receiving relief in England and Wales; and estimating the proportionate number also receiving relief, not included in the above, but in separate parishes, under local and

“Gilbert” Acts, &c., at 88,701, the total number of paupers is 888,141; or according to the census of 1851, *one* in every 20 inhabitants. Of the total number relieved, no less than 126,220 were able-bodied paupers. In Ireland the number receiving relief on the 1st January, 1853, was, 141,822, or 1 in 46 of the population; the number relieved in Scotland is not immediately ascertainable; it may be estimated at 1 in 50 = 57,774: showing a grand total of 1,087,737 paupers supported by local taxation.

The sums expended for this purpose, in England and Wales, from 1813 to 1853, amounted to £231,789,085. During the year 1852 the parochial rates exceeded £7,000,000. The levies raised for the relief of pauperism of all descriptions in Ireland are about £1,000,000 per annum. For Scotland there are no definite accounts; the assessments may be taken at half a million; giving a total of £8,500,000; if to this sum be added the moderate estimate of £2,500,000 raised by voluntary subscriptions for the relief of indigent and suffering humanity, we have an aggregate annual expenditure of £11,000,000 sterling occasioned by pauperism. In a distinct chapter on emigration the subject will be more fully discussed, but enough has perhaps been stated to show that no alarm need be felt at the present rate of departure from these sea-girt islands to other and more thinly peopled parts of the British empire. As water will find its level, so population will sooner or later burst through any barriers which impede its progress, much more those which restrict the means of obtaining food. It is the province of all true statesmen to endeavour to direct the stream of life into channels where, instead of threatening to overflow its natural banks and produce devastation and disorder, it will contribute to the general good, and strengthen the stability of a monarchy whose citizens enjoy an unequalled portion of substantial freedom, and a prosperity which, however comparatively great, is still but partially developed.

In the present volume the reader will find all the details connected with the wonderful discovery of gold in Australia, collected from governmental and private sources up to the present period, especially as regards the geological and natural features of the country, the progressive increase and spread of the inhabitants, the augmented commerce and revenue,—in a word, the “diggings,” and their results.

A U S T R A L - A S I A .

BOOK I.—AUSTRALIA, OR NEW HOLLAND.

CHAPTER I.

DISCOVERY, MARITIME SURVEYS, COAST LINE, INTERIOR EXPLORATION, WINDS, CLIMATE, AND GEOLOGY.

THE British possessions in Austral-Asia are Australia, or New Holland (which contains the several colonies of New South Wales, Port Phillip or Victoria, South Australia, and Western Australia, or Swan River), Van Diemen's island, New Zealand, the Chatham, Auckland, and other lesser islands—the whole comprising a territorial area in the Southern hemisphere nearly as large as Europe.

These extensive regions form an important and most interesting portion of our Colonial Empire, whether viewed in relation to their origin or progress, to their existing or prospective state.

In a favourable position, situated midway between America and Africa, and at the extremity of Asia, they are valuable in a political sense for the increasing capabilities they afford towards the maintenance of British power in the East—and in a commercial sense from their contiguity to the richest and most densely peopled portion of the globe: possessing in themselves (apart from these considerations) a fertile soil and a salubrious climate, they are well adapted for the dwelling of millions of the Anglo-Saxon race,—and even in this early stage of their existence, with many of their resources yet undeveloped, they are outlying farms, already instrumental in supplying England with augmenting quantities of grain, meat, wool, tallow, flax, timber, and other raw products, in exchange for her manufactures.

The insulated continent of Australia, remarkable for its great extent, singular conformation, and recent discovery, first claims attention. Less than a century ago the mere coast line of this "great south land" was an unsolved geographical problem, as its interior is at the present moment; in the

eyes of the learned its very existence was a phenomenon, and some idea may be formed of the strange surmises entertained on the subject, from the wild hypothesis of Blumenbach, that Australia must originally have been a comet or planetary body, which being drawn within the sphere of attraction, fell upon this globe. Even those skilful navigators, and scientific explorers, who have surveyed its coast-line, and, to a limited extent, penetrated the interior, appear unable to arrive at any satisfactory conclusion concerning the operating cause, or the probable epoch of the formation of this vast country—whether it has been in a comparatively modern age left dry by the receding waters of the ocean, or extruded from the bowels of the earth by subterranean fires.

But the interest excited by this question throughout Europe, or by the singular animal and vegetable products of a land of contrarities, merges into insignificance compared with that created by the extraordinary progress of British colonization at a distance of 15,000 miles from the parent state. The earliest settlement is within the recollection of the present generation. Conceived in a benevolent spirit, it was commenced in 1787 by the despatch to Botany Bay of a fleet laden with the refuse of our gaols and penitentiaries. For several years the convicts were repeatedly on the eve of perishing by famine, but stimulated by the hope of regaining their forfeited freedom, directed by the intelligence of their superintendents, and governed by a systematic and humane policy, these outcasts hewed down the forests, subdued the stubborn soil, and earned for themselves a home where "their sins were covered and their iniquity remembered no more."

These pioneers in the wilderness prepared the way, and smoothed the difficulties for their fellow-countrymen whom no crime had expatriated, but who sought at the antipodes the means of obtaining an honourable livelihood under the protection of the flag of their country, in the full enjoyment of the language, laws, and customs of their fatherland. The result of their joint labours is now manifest in the prosperous colony of New South Wales—the proudest monument of British civilization in the nineteenth century.

This success encouraged the settlement at Hobart Town, Van Diemen's Island, in 1801-2; at Swan River, Western Australia, in 1829-30; at Adelaide, South Australia, in 1835-6; at Melbourne, Port Phillip, in 1836; and at Auckland and Wellington, New Zealand, in 1840.

The progress of these Austral-Asian settlements is without a parallel in history, and their condition demands minute and impartial investigation on behalf of the owners of property in those colonies, and of the yet more numerous class of intending emigrants to whom every detail must be important, as a means of enabling them to decide on the locality best calculated to suit their peculiar circumstances, habits, and inclinations.

Having no theory to uphold—no private views to promote—no particular colony to serve, I shall endeavour in this, as in other portions of my work, to lay before the public the fullest amount of information contained in the official documents to which her Majesty's government has granted me access; and, guided by the knowledge personally acquired in Australia, collate from the varied, heterogeneous, and scattered materials furnished by the most trustworthy authorities, every useful or interesting fact which may contribute to the general good, and illustrate the power and resources of the British empire in this portion of the globe.

Australia, or New Holland, the largest island in the world, lies between the parallels of 10° 45' and 38° 45' S., and the meridians of 112° 20' and 153° 30' E. of Greenwich. It is separated on the north from the islands of New Guinea and the Lousiade by Torres Strait, and from Timor and other islands in the Eastern Archipelago by the Arafura sea; on the south, from Van Diemen's Island, or Tasmania, by Bass' Strait: its eastern and southern shores are washed by the Pacific, its western and north-western by the Indian Ocean. The latitudinal dif-

ference between Cape York and Wilson's Promontory, the northern and southern extremities, is twenty-eight degrees, equal to 1,680 geographical miles; the greatest distance from east to west is 2,227 geographical miles. The area is estimated at 2,690,810 square miles, and the coast line at nearly 8,000 nautical miles.

The distances and bearings of the several points around the coast are stated to be as follows:—

	Miles.
Wilson's Promontory to Cape Howe, N.E.	250
Cape Howe to Breaksea Spit, N. a little E.	950
Breaksea Spit to Cape York, N.W.	1,150
Cape York to Cape Van Diemen, W.	900
Cape Van Diemen to North-West Cape, S.W.	1,300
North-West Cape to Cape Leeuwin, S.	900
Cape Leeuwin to Great Australian Bight, E. a little N.	1,200
Great Australian Bight to Wilson's Promontory, S.E.	1,100

Circumference in round numbers 7,750

The proportion which Australia bears to the other divisions of the globe has been thus calculated by the distinguished French navigator, Du Freycinet:—

Divisions.	French Leagues.	Proportion.
Asia	2,200,000	17
America	2,100,000	17
Africa	1,560,000	12
Europe	501,875	4
Australia	384,375	3

Viewing Van Diemen's Island as a portion or prolongation of Australia, we may consider it as forming one of the marked tripodal capes or promontories which stretch from Asia, Africa, and America, towards the Antarctic Circle.

Discovery.—To what European or Asiatic nation the existence of Australia was first known, and when or by whom it was discovered, is a matter of great uncertainty, from the vague and often inconsistent statements by which the claims of various navigators are supported. Although we have no positive evidence, there appears much probability that the Chinese were aware of the existence of "a great south-land." Abundant records remain to prove, that from a very early period to the thirteenth century, they were a thriving and enterprising people, engaged in an extensive maritime trade. M. de Guignes says, "Nous trouvons dans les annales Chinoises des VII. et VIII. siècles, une route par mer depuis la Chine jusqu'à l'embouchure de l'Euphrate." The Arabian traveller, Ebn Wuahab, (A.D. 877.)

points out the route pursued at that time, in the voyage from Bussora to Canton; and Edrisi, writing in 1156, states, that Muscat, on the coast of Arabia, was annually frequented by ships from China. They had also, together with the Hindoos, constant commercial intercourse with Java and the Eastern Archipelago. It may, moreover, be worth noting in this place, that the nutritious trepang, or sea-slug, (*hêche de mer*), which has for ages been a favourite luxury with the Chinese, is found in great abundance on the northern shores of New Holland, which are, even to the present time, annually frequented by a fleet of fishing prows, from being the chief source from whence this singular edible is obtained. It may be urged, that this fact renders it the more unlikely that the Chinese were acquainted with the island, since, as a fishing-station of any value, clear records concerning it would be extant; but, on the other hand, we must not only remember the very slight knowledge we possess of the annals and charts of the Chinese, but also the serious injury, and indeed the almost total destruction of their maritime traffic by the piratical depredations of the Portuguese, Spaniards, and Dutch, who, in many instances, buried in oblivion important geographical information from the most selfish motives. On the island of Timor, distant only 250 miles from the coast of Australia, there are many Chinese, but how long they have been established there we have no means of ascertaining.

Among European nations, the earliest claim to the discovery of *Terra Australis* is made by the French, whose pretensions rest upon the assertion of de Brosses and the Abbé Prevost, that Paulmier de Gonneville, a French captain, who sailed from Honfleur in 1503, lost his reckoning, and was drifted into an unknown sea, from which he escaped by observing the flights of birds towards the south, and following them. Gonneville made the land, on which he lived for six months, refitting his vessel, and living on friendly terms with the natives, whom he represents as having made some advances in civilization. These could not have been the Australian savages; they may have been the people of New Zealand or of Madagascar. The distinguished hydrographer, Flinders, one of the best authorities on the subject, considers this claim unfounded, and adds, that the proofs adduced in its support themselves demonstrate, that it was not any part

of Australia, but Madagascar that Gonneville discovered, and from whence he brought a native, called Prince Escomerie, to Normandy. The discovery of a maritime route to the East Indies, *via* the Cape of Good Hope, by Vasco de Gama, under the flag of Portugal, in 1498, and of a passage to Asia, through the straits which separate Cape Horn from Patagonia, by Magellan, or Magalhaens, under the flag of Spain, 27th November, 1520, led to an extended acquaintance with the Eastern seas; and as it is certain that, during the earlier half of the sixteenth century, the Spanish and Portuguese navigators pushed their researches into the South Pacific, it is probable that the claim made by them to the discovery of at least the northern coast of Australia, is not wholly unfounded, though, if made, it was unattended by any practical result.

In 1526, Don Jorge de Menezes, who was appointed to the government of the Moluccas, sailed from Malacca, and spent some months in a port supposed to be in Papua or New Guinea. In the same year, Alvarez de Saavedra sailed from a port in Mexico in search of gold, and discovered Papua, and some of the adjacent islands.

In 1543, Ruy Lopez de Villabolo ranged the New Guinea and contiguous coasts.

In 1567, Alonzo de Mendana sailed from Lima, and discovered the thirty-three islets, which he named Solomon's Islands, "to the end that the Spaniards, supposing them to be those islands from which Solomon fetched gold to adorn the temple, might be the more desirous to go and inhabit them." In his second voyage he could not find the islands: he died seeking them, and was succeeded by Quiros, who abandoned the search when only forty leagues distant from them.

In the British Museum there is a manuscript book of charts, entitled an *Hydrographie*, compiled by John Rotz in 1542, and dedicated by him to Henry VIII. of England. In one of them is rudely delineated an ill-defined land, situated to the south of Java, and termed *Jave le Grand*, but the chart terminates abruptly, only a portion of the north and north-west coast of this territory being laid down. There is also a large manuscript chart on the Mercator plan in the Museum, numbered in the catalogue 5,413, prepared for the dauphin of France, which Mr. Holmes, who has charge of the chart department, and has paid much attention to the subject, supposes to have been

constructed about the year 1536. In this chart the coast line of the African and American continents, south of the equator, is traced with some degree of accuracy. This document likewise contains part of a country inscribed *Jave le Grand*, on whose shores are depicted men and huts, and immediately adjacent to Cape Horn, to the southward, is what appears to be part of a continent, on which is marked *La Terre Australie*; this would lead us to suppose that the hydrographer, whoever he may have been, was impressed with the belief, which then and long afterwards prevailed, of the existence of a great continent, running north and south from 33° to 64° S. lat., its northern coasts stretching along the South Pacific to an immense distance, and extending at least from the straits of Magellan to New Zealand. Leaving the region of conjecture, we know for a certainty that on the 21st December, 1605, Fernandez de Quiros sailed with three vessels from Callao, in Peru, one of the objects of his expedition being to search for the *Terra Austral*, a continent supposed to occupy a considerable portion of that part of the southern hemisphere lying westward of America. Quiros, after discovering several islands, came to a land which he named *Australia del Espiritu Santo*, supposing it to be a part of the great southern continent. Luis Vaes de Torres, separated from Quiros, coasted along the Louisiade Archipelago, sighted the hills and islands of Cape York in 11° S., and spent two months in surveying the intricate navigation of the strait by which the *Terra Austral* is divided from New Guinea. We know, however, little of his proceedings, or of those of Quiros, as the accounts were transmitted direct to the king of Spain, who kept them from the public, and the existence of the dangerous channel, now called Torres Strait, was generally unknown, until rediscovered and passed by captain Cook in 1770. Fortunately for his reputation in after ages, a copy of a letter of Torres to the king of Spain, dated Manilla, 7th July, 1607, was deposited in the archives of the Spanish settlement at Manilla, where it was found by Mr. Dalrymple (himself an hydrographer), after its capture by the British troops in 1762. The Englishman, with true generosity, gave the name of the enterprising Spaniard to the strait he had discovered.

Torres describes the strait as being filled by "an archipelago of islands without number; the bank shoaler in the eleventh

degree of latitude; the people black, corpulent, naked, armed with lances, arrows, and clubs of stone." This description of the people refers to New Guinea rather than Australia, from the mention made of arrows. Torres adds, "we caught in all this land twenty persons of different nations;" from which it would appear that Torres adopted the policy of Columbus, Cabot, and other early navigators, in seizing on the natives of new found countries, to testify to their respective governments the reality of their voyages.

On the 11th of November, 1605 (the same year in which Quiros and Torres sailed from Peru) the Dutch yacht, named *Duyfhen*, was dispatched from Bantam, the chief seat of government in the Eastern Archipelago, to explore the island of New Guinea.

The *Duyfhen* sailed along what was thought to be the west shore of that country, to 13° 45' S. lat., but which was in reality the north shore of *Terra Austral*, and then, being in want of provisions, proceeded to Banda, where she arrived in June, 1606, having unconsciously visited the "Great South Land," of which, in 1623, the yachts, *Pera* and *Arnhem* were sent in search from Amboyna. Jans Carstens, the commander of the expedition, with eight of his crew, were murdered on the coast of New Guinea; but the survivors pursued their voyage, and discovered "the great island of Arnhem and the Spult, or Speilt." (What is meant by "the Spult" it is now difficult to understand, but in the old charts a river is marked by that name, which is probably here intended to signify the land in its vicinity.) The *Arnhem* then returned to Amboyna; the *Pera* proceeded along the coast to Cape Keer Weer, (*Turn again*, supposed by some to be the west coast of New Guinea, by others to be the east coast of the Gulf of Carpentaria,) where the *Duyfhen* had previously been, and explored the coast as far as 17° S. lat. There is, however, much discrepancy in the accounts of this and other early voyages. In the years 1616, 1618, 1619, and 1622, the west coast was noted by several outward-bound vessels, among others by the *Endraght*; and in a manuscript chart, by Eesel Gerrits, dated 1627, the first discovery of it is attributed to Dirk Hartog, commander of the *Endraght*, bound to India (A.D. 1616), who saw the coast in 26° 30' S. lat., and sailed northward to 23°, giving the name of *Landt de Endraght* to the land thus surveyed. An important part of this discovery was the roadstead, called by his

name, at the entrance of a sound lying a little S. of 25°, afterwards named Shark's Bay, by Dampier. Upon one of the islands forming the roadstead, there was found, in 1697, and afterwards, in 1801, half buried in the sand, with the rotten remnant of a post attached to it, a tin platter, bearing an inscription, of which the following (as nearly as it could be deciphered) is a translation:—"Anno 1616, 25th October, arrived here the ship *Endracht*, of Amsterdam, first merchant, Gilles Miebais, of Luik, Dirk Hartog, of Amsterdam, captain. They sailed from hence for Bantam, the 27th do., A° 1616." The names of the under merchant and chief mate are illegible. In July, 1618, the *Mauritius*, another outward bound Dutch ship touched at Willem's River, near the North-West Cape, and a year after captain Edel, commanding a Dutch vessel, touched on the coast, and gave his own name to the land from 29° to 26° 30' S. lat. The great reef lying off this land, called *Houtman's Abrolhos*, was discovered at the same time.

The *Leeuwin*, also outward bound, fell in with the coast as far as 35°, and sailed along to the north, giving its name to the Cape, in 34° 19' S. lat., 115° 6' E. long.*

In 1628, the *Vianen*, one of the seven ships which returned to Europe under the command of Carpenter, the Dutch governor-general, from whom the deep gulf on the north coast takes its name, reported having seen the shore, and the circumstance is thus stated in the Dutch records: "the coast was seen again accidentally, and coasted 200 miles without gaining any knowledge of this great country, only observing a foul and barren shore, green fields, and very wild, black, barbarous inhabitants." This part was subsequently called De Witt's Land, but by whom does not appear. In Thevenot's collection of charts, &c., there is an account of the shipwreck of Francisco Pelsart, in the *Batavia*, on the 4th June, 1629, on the Abrolhos. Pelsart proceeded along the north-west coast in a small decked boat, crossed thence to Batavia, and returned with succours for his men; too late, however, for they had been murdered by the savages.

The south coast was accidentally discovered in January, 1627, by the Dutch ship, *Gulde Zeepaard*, outward bound from Hol-

land. It was called Nuyts' Land, from Pieter Nuyts, who is supposed to have commanded the *Zeepaard*, and is said to have traced it for 1,000 miles from Cape Leeuwin, and laid down a number of positions with great accuracy. The Dutch government being anxious to ascertain how far this great south land extended towards the antarctic circle, despatched Captain Abel Jans Tasman from Batavia, with two vessels, on the 14th August, 1642. Tasman, after touching at the Mauritius, steered south and east, and on the 24th November made some high land in 40° S. lat., 163° 50' E. of Teneriffe, which he named in honour of the governor-general, Antony Van Diemen's Land, and sailed along, not supposing it to be an island; he anchored in Storm Bay, then pursuing an east and south course, he discovered part of the west side of New Zealand, (of whose insularity he was also unaware, and considering it to be a part of *Terra Australis*, he named it Staten Land), the Friendly and Prince William Islands. In 1644, Tasman was sent by the Dutch East India Company on a second voyage of discovery, and directed, after passing the land of Arnhem, to "follow the coast further as it may run westward or southward, endeavouring by all means to proceed, that we may be sure whether this land is divided from the *Great Known South Land* or not." From this expression, it is evident that the Dutch had acquired a knowledge of some part of the *Terra Australis*, to which they about this time gave the name of New Holland. Unfortunately no account of this voyage has ever been published, except that contained in a garbled extract from Tasman's journal by Dirk Rembrantz, and translated in 1776, but his track is supposed to be indicated by the names given to different places, namely those of Van Diemen (as in a former instance), two of the council who signed his instructions, and of Maria, the daughter of the governor-general, to whom he was attached.

It is very probable that the Dutch East India Company did not consider that New Holland was in any way useful from its productions, and much feared the character of its inhabitants. Jans Carstens, who commanded the *Pera* and *Arnhem* in 1623, says, "in this discovery we found everywhere shallow water and barren coasts, islands altogether thinly peopled by divers cruel, poor, and brutal natives, and of very little use to the Company."

Witsen, in his "Notes," alludes to Tasman's

* The above statements are derived chiefly from the instructions given to Tasman when sent from Batavia on his second voyage of discovery, and signed by the governor-general Antonio Van Diemen, and four members of the council of Batavia.

describing the people on different parts of the coast as "bad and wicked," "shooting arrows," "throwing stones," "living very poorly," "feeding upon roots;" "there are few vegetables, and the people use no houses."

In 1663 Thevenot published his chart of the west coast of the "*Great South Land*."

In 1688 Dampier, the most observant navigator of his age, visited the west coast with the Buccaneers, and described it as low and sandy, with scarcely any vegetation on its shores. The Buccaneers careened and refitted in about 16° S. lat.

In 1699 Dampier was expressly sent as pilot in H.M.S. *Roebuck*, on a voyage of discovery, and visited the west and north-west coasts.

In Dampier's *New Voyage round the World* published in 1703, a chart of the world therein engraved only shews part of the north-west and south coast of New Holland, which is joined on the east to some land stretching towards the equator, and joining the islands of the Eastern Archipelago. The most southern part of New Holland marked, is in about 32° S. lat., and "Diemen's Land" is placed ten degrees further to the southward.

Dampier's track in 1699 was from Sumatra to the north-west coast of New Holland, whence he proceeded to Timor in September 1699; in the chart of his voyage, he lays down the coast as far north as the gulf of Carpentaria, traces part of the coast of New Guinea, but leaves an unexplored tract between that island and Australia, nearly in the position of Torres Straits; in fact direct north from the land we now call Cape York.

In recording his proceedings on the west coast, he states, "I spent about five weeks in ranging off and on the coast of New Holland, a length of about 300 leagues." He subsequently discovered New Britain.

1696.—William de Vlaming was sent in search of a Dutch ship, lost in 1684-5; he visited the west coast, found black swans near Rottenest Island, and named the place *Swan River*. He then sailed north as far as 21° 28'.

In 1710, captain Woodes Rogers was sent to the South Seas, with two vessels; Dampier was pilot; they sailed through what they termed *New Guinea Straits*.

1767.—Captain Carteret sailed through the strait which separates New Britain from New Ireland.

1721.—The Dutch East India Company

fitted out a squadron for discovery, under captain Roggewein, who lost one of his ships on the east confines of Australia. Having landed in New Britain, he was attacked by the natives, and returned without accomplishing any satisfactory results.

The justly celebrated captain Cook, in his exploring and scientific expedition with H.M.S. *Resolution* and *Adventure*, on the 6th of October, 1769, discovered the east side of New Zealand; continued surveying the coast until the 31st of March, 1770, when he proceeded to New Holland, and, to use his own words, "surveyed the east coast of that vast country which had not before been visited, and passed between its northern extremity and New Guinea;" thus demonstrating beyond a doubt the insularity of New Holland.

The first port in Australia which captain Cook entered was *Botany Bay*, in April, 1770; thence he sailed to the northward, and passed *Port Jackson*, which, from its narrow entrance at the "heads," he supposed to be merely a boat harbour, and gave it the name of the sailor then on the lookout at the mast-head. At *Cape Tribulation* on the north-east coast of Australia, the ship of captain Cook struck on a coral reef; he refitted and repaired her in the adjacent *Endeavour Bay*, and then proceeded to solve the doubt of New Holland being separated from New Guinea and the adjacent lands.

Captain Marrion, a French officer, with two ships, skirted the coast in 1772, in search of the supposed southern continent, and proceeded to New Zealand, (which had been rediscovered by captain Cook,) where he was murdered by the natives in the Bay of Islands. In 1768 the French navigator, De Bougainville, visited the Australian coast. In 1791, the south coast was visited by captain George Vancouver, on his way to the north-west coast of America; he made the land on the 26th September, at Cape Chatham, in 35° 3' S. lat. and 116° 35' E. long.; then sailed east along the coast till the 28th, when he anchored in a sound, which he named after George III. Bad weather prevented his doing more than verifying a part of the coast laid down in Nuyt's chart of 1627.

On the 9th March, 1773, captain Tobias Furneaux, second in command in the expedition under captain Cook, in H.M.S. *Adventure*, made the south-west cape of Van Diemen's Island, and steered east, close to the rocks called *Maatsuyker's* by Tasman,

afterwards anchoring in what he took to be Storm Bay, (which he called Adventure Bay), so named by Tasman in 1642; not, however, the Storm Bay laid down in the present charts, but that now termed D'Entrecasteaux's channel, which runs inland for ten leagues, and communicates with the true Storm Bay of Tasman. Captain Furneaux then sailed along the Van Diemen coast to the northward, to discover whether it was separated from New Holland, or was a peninsula forming part of the main land; but he finally steered for New Zealand, giving it as his opinion that "there was no strait between Van Diemen's Land and New Holland, but only a very deep bay." Captain Cook, with H.M.S. *Resolution* and *Discovery* made the south-west Cape, 24th Jan. 1777, and after steering eastward, anchored, as Furneaux had done, in Adventure Bay on the 26th; but captain Cook proceeded on his voyage, still ignorant of the insularity of Tasmania.

In 1792, Bruni D'Entrecasteaux, a French rear-admiral, with two ships of war, *La Recherche* and *L'Espérance*, made the coast of Van Diemen's Land, to obtain supplies of wood and water; and while intending to enter the Storm Bay of Tasman, entered the Adventure Bay of Furneaux, up which he sailed thirty miles, and found it to be separated by a small island from Storm Bay. The island he named *Brumy*, and the channel *D'Entrecasteaux*, and then sailed to the eastward without ascertaining that Van Diemen's Land was insulated.*

Captain Bligh, in 1788, in the *Bounty*, and in 1792 with the *Providence* and *Assis-tant*, and captain John Hayes, of the Bombay Marine, with the private ships *Duke* and *Duchess* from India, in 1794, visited different parts of the Australian coast, without adding much to our geographical knowledge.

The survey of admiral D'Entrecasteaux extended from Cape Leeuwin to 132° E. long. in Australia, and comprised the southern extremity of Van Diemen's island, including the river Derwent and the channel which bears the name of the accurate surveyor. Captain Flinders states that "the charts of the last survey, particularly those relating to the bays, ports, and arms of the sea of the south-east of Van Diemen's Land, and constructed in this expedition by M. Beau-

temps Beauré, and his assistants, appear to combine scientific accuracy and minuteness of detail, with an uncommon degree of neatness in the execution. They contain some of the finest specimens of marine surveying perhaps ever made in a new country."

The able, but unfortunate French navigator, La Perouse, visited the east coast of Australia with the French ships of war, *La Boussole* and *L'Astrolable*; these vessels were last seen by any Europeans in January, 1788. When captain Phillip, R.N., and the fleet of convicts sent out to form the penal settlement in New South Wales, were removing from Botany Bay to the more eligible adjacent station of Port Jackson, La Perouse was entering Botany Bay to refit. The British and French commanders exchanged the civilities common to their gallant profession. La Perouse perished shortly after on the Vannicolo island: it is supposed that the vessels were lost on a coral reef. After a lapse of forty years, captain Peter Dillon, in 1826, discovered relics belonging to the French ships, and placed beyond a doubt the period and place of their loss.

After the formation of the British penal settlement at Port Jackson (Sydney), in 1788, attention was directed to the eastern and southern shores of Australia; and Mr. Bass, surgeon of H.M.S. *Reliance*, and lieutenant (afterwards captain) Flinders in a little boat called *Tom Thumb*, eight feet long, aided only by a boy, commenced a survey of the coast. Mr. Bass was afterwards reinforced with a whale boat, six men, and six weeks' provisions; in this open boat, and in boisterous weather, he explored the south-east coast for 600 miles, entered what Furneaux considered a "deep bay," and in 1798, became satisfied that there was a strait separating Van Diemen's Land from New Holland. On his return to Sydney, governor Hunter was induced to verify the results of Mr. Bass's observations by sending lieutenant Flinders and Mr. Bass in the colonial schooner *Norfolk*, of twenty-five tons burthen; with this little vessel, they sailed through the strait now called Bass's Strait, and by circumnavigating Van Diemen's Land demonstrated for the first time its insularity, and completed the coast line of Australia. The result of these remarkable labours of Bass and Flinders, was a survey of the coast

* The mistake of D'Entrecasteaux was then a very probable one, for notwithstanding our extended knowledge of the coast, a similar error was committed during the night by a vessel in which the author sailed some

years since. Navigators should be cautious in approaching this part of the coast, as they are very liable to be deceived by the headlands.

line from Sydney to Western Port, of the islands in Bass's Strait, of the bays and coves of the river Derwent, and of Tasman's Peninsula. Sir John Franklin, recently lieutenant-governor of Van Diemen's Island, whose presumed loss in the arctic regions the nation now mourns, began his noble career under Flinders. At his own cost, Sir John erected, in 1841, a lofty stone obelisk on Stamford hill, near Port Lincoln, South Australia, to commemorate the great services of "the illustrious navigator and his honoured commander." Flinders himself recorded a high eulogium on his "high-spirited and able colleague," surgeon Bass, who well deserves "an honourable place in the list of those whose ardour stands most conspicuous for useful knowledge." In December, 1800, captain Grant, in H.M. brig *Lady Nelson*, passed through Bass's Straits, and explored the coast from Port Western to $140\frac{1}{4}^{\circ}$ of E. long. In 1802, lieutenant John Murray, who succeeded captain Grant in the command of the *Lady Nelson*, discovered Port Phillip ten weeks previous to the arrival of captain Flinders in that bay.

The survey of captain Baudin of the French navy in the *Geographe*, was contemporaneous with that of Flinders; it comprised the southern coast of Australia between $35^{\circ} 40'$ and $37^{\circ} 36'$ S. lat., and $138^{\circ} 58'$ and $140^{\circ} 10'$ E. long., a coast line of about 150 miles in length, devoid of rivers or inlets; also the north-west coast, from Cape Leeuwin to Rottenest Island, Swan River, and thence partially to Cape Londonderry on the north coast.

In April, 1802, Baudin and Flinders met in the neighbourhood of Spencer's Gulf, and although their respective countries were engaged in fierce hostilities, the commanders met on board the *Geographe*, and communicated freely to each other all the information that was likely to be useful. The expedition of captain Flinders was thought to be secured against the chances of war by a passport granting it protection, assistance, and free ingress and egress to and from the ports of the French republic; but when Flinders, driven by stress of weather from the west coast of Australia, was obliged to seek shelter at the Isle of France, or Mauritius, then a French colony, he was most unjustly and cruelly detained a prisoner for eight years, by the governor-general De Caen, and his charts seized, despite passports and remonstrances.

The gradual progress of discovery on the

Australian coast has now been chronologically detailed to the commencement of the present century. The subsequent voyages and discoveries of those skilful and enterprising British seamen, of Flinders (1801—2), King (1818—20), Wickham and Stokes (1837—43), of Blackwood (1842—46), of Stanley, Bremner, Chambers, Heywood, Hobson, and other naval officers, have furnished valuable nautical surveys of the coast line of this vast island, the whole of which now appertains to the British empire.

The surveys of Flinders include the south, west, and north-west coasts of Australia to the Gulf of Carpentaria, and high credit is due to this intrepid and persevering surveyor; captain P. P. King's invaluable labours include 2,700 miles of coast, principally on the north and east, and involved 40,000 miles of sailing. The interesting examinations of captains Wickham and Stokes commenced on the east coast, and included the Gulf of Carpentaria, Torres Straits, the north and north-west coast, Dampier's Archipelago, Houtman's Abrolhos, the Swan River coast, Bass's Strait, and Adelaide, South Australia. Captain Blackwood's meritorious exertions were chiefly devoted to Torres Straits, the dangerous reefs and islands in that route, and the north-east coast of Australia.

Reserving for separate consideration the aspect of the several colonies in Australia—viz.: *New South Wales* on the east coast; *Port Phillip, or Victoria*, on the south-east, adjacent to Van Diemen's Island; *South Australia*, on the south coast, westward of Port Philip; and *Western Australia, or Swan River*, on the western and south-western shores, a few general remarks on the physical features of Australia may be useful.

PHYSICAL FEATURES.—The outline of Australia is singular: the parallelism of the coast lines gives a geometrical form to the island; the greatest width, from east to west, is in the parallel of 25° ; the greatest length, from north to south, is from Cape York to Wilson's Promontory. Nearly in the same meridian, viewing Van Diemen's Island as a continuation of Australia, its projection on the south, in a direct line with the Carpentaria promontory on the north, is remarkable. The deepest indentations of the island are opposite each other on the north and south coasts. The east and west coasts have nearly the same general configuration; and at Sandy Cape, on the east coast, and to the southward of





Engraved by J. Smith

AUGUSTUS, VISCOUNT KEPPEL.

OB. 1786.

FROM THE ORIGINAL OF SIR JOSHUA REYNOLDS, IN THE COLLECTION OF

HIS GRACE, THE DUKE OF BEDFORD

the same parallel, on the west coast, at North-West Cape, there are two peculiar projections of the land. The trend on the shore from north to west is somewhat like that from north to east; the indentations between Coburg peninsula and Cape Londonderry on the north-west, nearly correspond with the expansions on the south-east; the trend of the coast from Kangaroo Island towards Fowler's Bay on the south, is parallel with that of the opposite coast line of the Gulf of Carpentaria: finally, the great Australian Bight on the south somewhat corresponds with the protrusion of Arnhem's land in Northern Australia. The peculiar external form of Australia may be, in some degree, owing to the different degrees of force to which the land is subjected by the surrounding waters. On the south, where the coast is not protected by Van Diemen's Island, the tremendous effect of the unbroken roll of the ocean from the pole is manifested in the deep Bight. On the north-west the full swell of the Indian Ocean produces a corresponding slope of the coast; on the north-east the Pacific flows with majestic sweep from the American continent; and on the north, the fluctuating pressure caused by the monsoons is broken by the islands of the Eastern Archipelago.

The coast-line of Australia is marked by deep gulfs, fine bays, and capacious havens. On the north is the large gulf of Carpentaria, with York Harbour or Endeavour Strait at the north-east limit, and Melville Bay at the north-west entrance; Van Diemen's Gulf, Cambridge Gulf, Admiralty Gulf, Brunswick Bay, Queen Charlotte's Channel, Melville Island, Raffles Bay, and Port Essington, afford many secure ports on the north and north-west shores. On the west there are Prince Regent's inlet, Doubtful Bay, King's Sound, Buccaneer's, and Dampier's Archipelagos, Exmouth Gulf, Shark's Bay, Freycinet Harbour, and Swan River. Port George the Fourth, Hanover Bay, and Camden Sound, lying close to each other, are noble havens, and have a fine tract of country in their rear. On the south, King George's Sound, Fowler's Bay, Spencer's (200 miles deep) and St. Vincent's Gulfs, Encounter Bay, Portland Bay, Port Phillip, and Western Port. On the east are Jervis Bay, Botany Bay, Port Jackson, or Sydney, Newcastle, Port Stephens, Port Macquarie, Moreton Bay, Hervey Bay, Port Curtis, Keppel Bay, Port

Bowen, Princess Charlotte Bay, and numerous secure roadsteads situated on the north-east, between the Barrier reefs and the coast.

Australia, like the other continents, has an island of considerable magnitude attached to it, namely, that of Van Diemen, or Tasmania, which lies at its southern extremity. The other principal islands are Melville and Bathurst on the north. Kangaroo, near St. Vincent's Gulf, and Groote, in the Gulf of Carpentaria, Great Sandy Island on the east, and exactly opposite it, on the west coast, Dirk Hartog's Island. There are several smaller islets and groups, viz.—Prince of Wales' Island, off Cape York, the Wellesley, Pellew, and others, in the Gulf of Carpentaria; Wessel, and English Company Isles, near Melville Bay; Buccaneer's Archipelago of islets, south-west of Cape Londonderry, Dampier's Archipelago, Barrow, and other islands north-east of the north-west cape, off De Witt's Land; Bernier and Dorre, off Shark's Bay; Rottenest, &c.; at Swan River; Recherche Archipelago, on the south coast, between King George's Sound and west of the great Australian Bight; Nuyts' Archipelago; Investigators' and Flinder's islands, west of Spencer's Gulf; King's, Furneaux, and others in Bass's Straits, between Australia and Van Diemen's Island. The south-east coast is deficient in islands, and has few indentations like the north or south coasts. From Wilson's promontory to Moreton Bay there are no islands but those of Stradbroke and Moreton, and the Solitary Isles north of Port Macquarie. Howe's and Ball's Pyramid Islands, east of Port Macquarie, are 400 miles from the shore, and do not partake of the features of Australia. They are very remarkable, and rise in basaltic columns from the sea. Proceeding to the northward, along the east coast, we find Great Sandy Island, the Capricorn group, (where the coral islets commence), including Bunker Islands, Keppel Island, the Northumberland, Percy, Hillsborough, Palm, Lowe, and other minor islands. The Capricorn group of islets, on the north-east coast, have the tropic of Capricorn and the 152nd degree of E. long. passing through them.

Coast Rivers.—In no other part of the globe could a similar extent of coast line be found with so few navigable rivers. The *Murray*, in South Australia; the *Hunter* and *Brisbane*, in New South Wales; the *Albert*, disemboguing into the Gulf of Carpentaria;

the *Adelaide*, into Van Diemen's Gulf; the *Victoria*, into Cambridge Gulf; the *Prince Regent*, *Fitzroy*, and *Glenelg*, on the north-west coast; and the *Swan*, in Western Australia, are the only streams navigable for ships for even a few miles from the ocean, where their entrances are barred.

So far as the country is known one mountain range bounds the coast from Bass's Straits to York Peninsula, and is continued in what Leichardt calls a "collar" round the Gulf of Carpentaria; on the western shore ranges run parallel with the coast, and slope off towards the west and north. Probably the highest mountains will be found at the Australian Alps, in the south-east, and at Arnhem and Tasman land in the north-west. The dip of the high land on the east coast appears to be from south to north, viz., from Mount Kosciusko, 6,500 feet high in the Australian Alps, in $36^{\circ} 20' S.$, to Mount Hinchinbrook, 3,500 feet, in $18^{\circ} 22' S.$; Cape Direction, 1,250 feet, in $13^{\circ} S.$; and Pudding Pan Hill, only 384 feet in $11^{\circ} 19' S.$ From Fowler Bay, in the Australian Bight, westward to King George's Sound, there are low cliffs of a calcareous marine formation, or sandy dunes, with occasional points of granite; the general elevation being from 300 to 500 feet, without a single watercourse for 800 miles; and according to an intelligent writer in the *Sydney Herald*, the north-west coast between the parallels of 16° and 21° is composed of low sandy beaches, with no appearance of high land behind them. With these two exceptions the whole of Australia is surrounded by a mountain belt, from 2,000 to 6,000 feet in height, at a distance of 50 to 100 miles from the coast, with collateral spurs or buttresses. From the outer and most precipitous side of this girdle short rivers flow to the sea coast; from the inner and less precipitous face, which in several places declines in successive terraces, different rivers flow, it is supposed, towards some great central basin, or are swallowed up in the burning sands, or evaporated by the intense heat of a tropical atmosphere, increased by the distance of the central parts of Australia from the sea, or possibly these inland streams may be absorbed by immense marshes. But all these suppositions would seem to indicate that this vast island is of recent date compared with other portions of our globe, and that the interior is still little better than a slightly elevated ocean bed, with a mountain crust around it.

Coast Line of Unsettled Parts of Australia.—The information obtainable on this head is fragmentary and imperfect, but I shall endeavour to frame a connected view, so far as is known, of the physical features, commencing with *Cape Capricorn*, on the east coast, in $23^{\circ} 30' 30'' S.$ lat. The most remarkable features on the adjacent shore are—Round Hill, 2,000 feet; Mount Larcom, 1,800 feet; and Peaked Hill, which stand out in bold relief against the pure blue of an Australian sky; they are fronted with groups of coral islets connected with the Great Barrier Reef.* *Cape Capricorn* itself has a hump resembling a haystack.

Southward of Port Bowen there are two peaks with an elevation of about 2,000 feet, which form the northern end of a high rocky range. The country surrounding Port Bowen is picturesque, many ranges of hills, both peaked and roundbacked, rise near the coast, and have an elevation in the interior of 2,000 to 3,000 feet.

In consequence of shoal bars there is not an easy entrance for large vessels much further than *Entrance Island*. The country, when visited in February, 1843, appeared dried up; not a drop of fresh water to be found anywhere.† But this may not always be the case. Dr. Leichardt, speaking of the country contiguous to the north-east coast in 1844, assigns reasons for supposing that part of Australia to have been exceedingly dry for a series of years.

About *West Hill* and *Broad Sound* the coast of the main land is formed of a low sandy shore, with a flat country of five or six miles wide, backed by a bold range of lofty flat-topped hills, with here and there a conical peak. *West Hill* rises directly from the sea to the height of a thousand feet. The seaward cliff of *West Hill*, and, in the opinion of Mr. Jukes, the mass of the hill itself, is composed of very fine grained trap or basalt, with small crystals of feldspar only visible with a lens. The rock is split by innumerable joints and veins, crossing at all angles into masses of different shapes.

The *Northumberland Islands* have an elevation from 200 to 400 feet; in one instance of 720 feet. The crests of the western isles are covered with pine trees. The *Percy Islands* are also elevated, wooded, and composed of a trap-like compound with an aspect of serpentine.

* Stokes's Discoveries in H.M.S. *Beagle*, 1837—43.

† Jukes's Voyage of H.M.S. *Fly*, 1842—46.

At *Cape Palmerston* there is a small headland of red quartzose rock, and adjacent there is a cove five or six miles deep by three wide. Near to the harbour are grassy slopes, open woodland, and hills with jungle and lofty trees.

The coast between Broad Sound, in $22^{\circ} 15'$ S. lat., and Whitsunday Passage, in $20^{\circ} 20'$ S. lat., differs in some respects from any part of the coast seen by the officers of H.M.S. *Fly*. A solid range of uniform hills, at a distance of five to ten miles from the coast, bounds a fine undulating tract of country, well watered, covered with abundant close grass, timber of large size and various descriptions, and many small bays and inlets.

Cape Hillsborough is a bold headland, 900 feet high, and very steep all round.

Cumberland Island is a singular mass of rocks, and appears as if made up of angular fragments of compact feldspar cemented together.

At *Port Molle*, at the north-west end of Whitsunday Passage, the shores rise in a steep slope, and in some of the places adjacent to the strait, have an elevation of several hundred feet, covered by magnificent forests, the greater part of which are of the pine species. This timber tree, which resembles the Norfolk Island pine, is found along the east coast from Port Bowen to Cape Melville, but Whitsunday Passage seems to be the favourite locality.

Mount Dryander, on the promontory which terminates Cape Gloucester, is more than 4,500 feet high. There are hills around to the height of 700 to 1,000 feet.

Cape Upstart, so called by captain Cook, consists of a huge mass of granite, about 2,000 feet high, rising abruptly from the water on all sides, and connected with the mainland by a mangrove swamp. It has a singularly rugged and barren aspect, and appears like a vast mass of ruins,—its crests are covered by huge boulders, or blocks of loose rock, with patches of scrubby vegetation. The cape is insulated by a small creek winding round the southern foot of the high land, and connecting the bays on the east and west sides of Cape Upstart. Immense beds of mangrove stretch round the head of Upstart bay, and a wide flat runs for some miles beyond them into the country, over which are seen some bold hills, in separate groups, rising like islands out of the level land.

Captain Blackwood, R.N., crossed a very

pleasant grassy country, towards the hills in the north-west.

Mount Elliott, lying about forty-five miles west and by north from Cape Upstart, is a long level hill, peaked at its northern extremity.

Wickham River, north of Cape Upstart, is approached through heavy breakers, and the opening seen by H.M.S. *Fly* in 1844 was about three miles wide, and had a depth of three and a half fathoms, about 200 yards from the north shore, where the land was an open forest country, with green grass and scattered trees. The south shore seemed a great mangrove swamp, with a spit of sand running out to sea among the breakers. At a distance of seven miles from the inside of the breakers, the reach of the river curved to the west, became shallower, leaving the steep cliff and forest land of the north or left bank, passing over flats of sand and pebbles; beyond this the boat could not proceed. From the top of the river cliffs, forest land was seen stretching into the interior, the trees close together, and the underwood thick.

The land round *Cape Bowling Green* is scarcely above the level of the sea, and is probably the delta of a large river. Palm islands are lofty, wooded, and have a picturesque appearance, especially *Magnetic Island*, so named by Cook. The mountain range seen from Cape Bowling Green is at least thirty miles in the rear.

Cape Cleveland is, like Cape Upstart, abrupt and broken, but more woody, having fine pines in many of its gullies. At this point the cordillera of Eastern Australia tower to a considerable elevation close to the coast. From Cape Grafton to Cape Tribulation precipitous hills, bordered by low land, form the coast line; the latter-named cape consists of a lofty group with several peaks, the highest of which, in the shape of a finger, is visible from the sea at a distance of twenty leagues.

Gould Island Peak, in Rockingham Bay, is nearly 1,400 feet above the sea; about five miles to the south-west of it is *Mount Hinchinbrook*, 2,500 feet high. It is a broken mass of hills, covered with ragged knolls, and sharp inaccessible pinnacles, furrowed by deep and precipitous ravines. On the mainland is an unbroken range of high land, none of less than 2,000 feet elevation, stretching along the shore to the southward, and after sweeping round Rockingham bay it rises and spreads to the northward into

still loftier and more broken mountainous elevations. The summit of this range, near Rockingham bay, is very level, but there are some projecting buttresses and ridges on its seaward slope, which is everywhere very steep, and apparently furrowed by many gullies and water-courses.

Endeavour River, where captain Cook careened in 1770, after grinding the bottom of H.M.S. *Resolution* for twenty-three hours on Endeavour reef, has for its external aspect bare and rocky hills of moderate height, with their seaward slopes almost destitute of vegetation. On the north shore is a line of sand dunes beneath the higher hills; on the south shore is a hill of moderate elevation, tolerably clothed with small eucalypti, and sloping down to a grassy flat, fronted by a line of mangroves. Beyond these the land is low for some miles, and then backed by tabular flat-topped hills a few hundred feet high, and of a different aspect to those usually seen on the coast.

Cape Bedford is one of the most remarkable features on this coast, being a bluff detached piece of table land, surmounted by a singular low line of cliffs, which forcibly reminded captain Stokes of the lava-capped hills on the river Santa Cruz, in East Patagonia.

Cape Flattery is a conspicuous headland, consisting of two peaks, with a slope between them.

Lizard Island, in $14^{\circ} 40'$ S. lat., has a bold aspect of nearly 1,200 feet elevation, composed entirely of granite, and nearly destitute of wood; on the westward is a grassy well watered plain, with some smaller ridges. The appearance of the coast now changes from moderately high conical-shaped hills to table-land ranges of 500 to 600 feet, trending about south-west and by west.

Cape Melville, which stands out like a shoulder for more than forty miles beyond the coast line, is composed of piles of reddish coloured stones, scattered about in the utmost confusion, and in every possible direction, over a high ridge. There are several dangerous islands and rocks off this headland.

Princess Charlotte Bay is large and free from shoals; at the head of the bay is a remarkable level-topped hill, conspicuous from the low nature of the surrounding country.

Claremont Islands are a low rocky group, surrounded by coral reefs.

Cape Direction has a moderately increasing height, compared with the coast immediately to the southward. A round hill, in 13° S., has an altitude of 1,250 feet.

Restoration Island [visited by captain Bligh in the *Bounty* launch, in 1789,] in $12^{\circ} 37'$ S., is a rocky lump, terminating in a granitic peak, 360 feet high. It was so named by Bligh, from his having seen it upon the anniversary of the recall of Charles II. to the throne of England.

Fair Cape, and thence to the northward, presents a series of undulating hills from 500 to 700 feet in length. The monotonous aspect is broken by *Pudding-pan hill*, so named by Bligh from its resemblance to a sailor's pudding-pan. It has a height of 354 feet.

Cape York, the most northern point of Australia, has a small rocky island not quite 300 feet high, steep, and nearly conical, separated from the main land by a narrow boat passage. Immediately south of Cape York Island the land rises into a somewhat sharply-peaked hill, with an elevation of 420 feet. It is called Bremer Peak. To the eastward is a shallow bay, with a flat sandy beach, backed by a belt of jungle, then a small woodland, and behind rocky hills 300 feet in height, one ridge of which comes down to the beach. Excellent fresh water is everywhere procurable by digging, and this position seems well adapted for a British settlement, as it would, in fact, form a "corner shop" for all vessels passing to the eastward.

Endeavour Strait, between Cape York and Cook's islet, is a safe harbour for shipping, except in one or two places near the shore. The west entrance is encumbered by large sand banks, through which, however, there is a safe passage, with never less than four fathoms water. The islands which stretch to the northward from Cape York, across Torres Straits to New Guinea, are all rocky, steep, many 500 feet high, and composed, like the rocks of the adjacent main land, of porphyry, sienite, and siliceous schist. Mr. Jukes considers them merely the submarine prolongation of the great mountain chain of the east coast of Australia, and which passes from New South Wales to the southward, through Bass' Straits to Van Diemen's Land. The loftiest and most massive portion is between Cape Upstart and Cape Melville, whence it gradually decreases to Cape York, where the hills are 500 to 600 feet high.

Possession Islands in the mouth of En-

deavour Strait, and the larger islands to the northward, are all rocky and barren, with here and there small fertile and cultivable spots, and by no means deficient in beauty, being of varied and undulating surface, with lofty peaks and ridges, and sheltered valleys, but they seem to be mostly destitute of water except in the rainy season; their inhabitants are few and scattered, and appear to be peaceable and well-disposed.

Booby Island, much frequented by boobies, pigeons, and quails, called also the "Post Office," forms the western limit of all the dangerous part of Torres Straits in the ordinary track of vessels, and for half the year it is a constant place of resort for vessels proceeding to India and China from Australia. It is a mere rock, about fifty feet high and a quarter of a mile in diameter, the summit consisting of bare porphyry.

A shed has been erected, beneath which is a large chest containing a blank book with pens and ink, a bag of beef and some biscuit for any boat's crew escaping from a wreck. Letters are left here by ships, and notices are entered in the book announcing their safe arrival. (A similar practice prevails at the Galipago Islands in the Pacific among the whalers.) All the ships which have recorded their passage at the "Post Office" appear to have entered the Barrier Reef between the parallels of $11^{\circ} 30'$ and $12^{\circ} 10'$, generally about $11^{\circ} 50'$, reaching Sir Charles Hardy's Island the same day. They all note a strong northerly current outside the reef, in some instances of nearly three miles an hour. The time occupied in making the passage from Sydney by the outer route was from fourteen to twenty days, which was shorter than the route between the reefs and the main land, though attended with much greater risks. In traversing the "inner route," vessels are obliged to anchor every night, which is a severe labour for the small crew of a merchant ship.

The *Barrier Reefs* are a peculiar and important feature in the N. and N.E. coast of Australia; the great coral reefs form a vast submarine buttress which skirts the shore, and in the instance of the "*Great Barrier Reef*" extend from Breaksea Spit in $24^{\circ} 30'$ S. lat. and $153^{\circ} 20'$ E. long., to Bristow Island on the coast of New Guinea, in $9^{\circ} 15'$ S. lat. and $143^{\circ} 20'$ E. long., a distance in a straight line of about 1,100 geographical, or 1,260 statute miles—the longest known coral reef in the world. This reef stretches along the Australian coast at a mean distance of

thirty miles from the land; the outer edge being in some places not more than ten or fifteen, in others 100 miles distant. Outside the barrier there are numerous detached reefs, of greater or less magnitude, extending from Torres Strait to New Caledonia; but the distance of these isolated reefs from the Great Barrier, is from sixty to one hundred miles. There are therefore two passages for vessels sailing from Sydney by the N.E. route to Singapore, China or India, *via* Torres straits—*first*, the *INNER* passage, about thirty miles wide, between the main land and the Great Barrier; and *second*, the *OUTER*, sixty to one hundred miles wide, between the Great Barrier and the detached reefs and coral islets, which are so numerous that Flinders gave to Torres Straits the appellation of the coral sea. Mr. Jukes, the naturalist, on board *H.M.S. Fly*, captain Blackwood, recently engaged in laying down beacons, by which vessels proceeding to the eastward through Torres Straits might be enabled safely to enter the principal openings in the Great Barrier in order to pass between Australia and New Guinea, has given in an interesting "*Narrative of the surveying voyage of H.M.S. Fly*," useful details respecting these reefs, on the authority of Mr. Evans, master of *H.M.S. Fly*. It appears that the Great Barrier reef is composed of different formations of coral, viz.:—the (1) *linear*, (2) *detached*, circular, or oval groups. The linear rise from great depths, have a breadth varying from a quarter of a mile to a mile; are in length from three to fifteen miles; have on the outer side an unfathomed depth, and on the inner, soundings of from ten to twenty fathoms. The detached reefs are generally circular or oval, flat at the surface or near the level of low water, the edge gradually rounded off, sloping down into deep water, sometimes to 200 fathoms, and at Wreck Bay to 285 fathoms without soundings. The centre consists generally of dead coral branches, among dazzling white sand; the living corals are more to the edge of the reef. The line of reefs runs N. and N. by E., whilst the Australian coast trends to N.N.W.; the distance from the land is gradually increased, and at Cape York in $11^{\circ} 40'$ S. lat. the passage is eighty to ninety miles wide; it is, however, supposed there are several inner reefs, and as the coral polypi are continually sending up new banks, this passage, even with its smooth water, must always be hazardous. On the authority of captain Flin-

ders, it is stated that the Great Barrier reef towards the south, is ninety to one hundred miles from the shore, with which it has no cross communication. The breadth of the reef towards the south is forty or fifty miles; it becomes narrower towards the north. At Cape Tribulation, in about 16° S. lat., the Barrier Reef closes in with the shore. For about 350 miles from the southern opening off Breaksea Spit, there is no navigable passage through the barrier that can be safely trusted; there are some crooked intricate openings. The interior passage between the reef and the land is remarkably clear from dangers, except in the vicinity of the numerous little islands with which it is dotted; the depth of water at a distance from these islands is very uniform. When the wind is from the east, the sea breaks upon the outer margin of the reef with terrific violence, but the inner waters are perfectly tranquil.

Wreck Reef, upon which captain Flinders was wrecked with H.M.S. *Porpoise* and *Cato*, in 1803, is 300 miles to the north-west of Breaksea-spit, and it was then an incipient island, in length 150 fathoms, by fifty in breadth, with a general elevation of three or four feet above ordinary high water. A few diminutive salt-water plants resisted the saline spray; the eggs of sea-fowl were observed; and probably now there are cocoa-nut or other trees, whose nuts or roots have been drifted there by the ocean.

On a reef may be seen coral growing beneath the surface of the clear water, in the shape of wheat sheaves, mushrooms, stag's horns, cabbages, and a variety of other forms, with vivid tints of every shade betwixt green, purple, brown, and white; equalling, says Flinders, in beauty, and excelling in grandeur the most favourite parterre of the curious florist.

The manner in which a coral reef is formed is very singular. The animalcules which produce the coral, commence with singular instinct to make their structure perpendicular; when they cease to live, the whole mass becomes agglutinated, and the interstices are gradually filled up by sand and broken pieces of coral washed up from the sea, until a mass of rock is formed. Another race of animalcules then proceed to build on this foundation. As each successive generation perishes, another takes its place, to increase the elevation of their habitation, and the coral wall, where the winds are pretty constant, first reaches the

surface of the ocean to *windward*: so that the insect may have shelter to send off numerous colonies to *leeward*, protected from the wind and surf. Hence the greatest depth of water and the highest part of a reef is always to windward, and the wondrous structure thus raised has, on the one side, a nearly perpendicular elevation of 200 to 300 fathoms. When the reef is raised above high-water mark, the coral insect ceases to exist. The different corals, in a dead state, are converted into a solid mass of a dull white colour; and some lumps, called "negro heads," higher than the surrounding mass, become blackened by the weather. Sponges, sea-eggs (*echine*), enormous cockles (*chamagigas*), and "cucumbers," (a large slug called *holothuria*, by the French *bêche de mer*, by the Chinese *trepang*), and other substances soon fill the crevices of the reef: sand accumulates; sea-birds make the bank a place of incubation; soil is formed; the seeds of shrubs and trees, which constitute the food of some birds, are deposited on the island, which soon becomes a mass of living verdure.

The beacon erected by captain Blackwood, of H.M.S. *Fly*, on Raines islet, as a mark for the best passage through the outer line of reefs, is a circular stone tower, forty feet high, and thirty feet in diameter at the base, where the walls are five feet thick. Internally it is divided into three stories, accessible by ladders. The roof is a dome-shaped frame of wood, covered by painted canvas. The summit is raised seventy feet above low water-mark. There is a large tank adjacent; and a garden has been planted with cocoa-nuts, maize, pumpkins, &c.

Torres Strait is one mass of islands, reefs, and shoals, with six to twelve fathoms water at the narrowest part, and nowhere deep water, so that with clear weather, and the sun vertical or in the rear, a vessel may be safely navigated. The beautiful light of the tropics is increased by the reflection of the nearly colourless bottom, covered with various mollusca, some perfectly transparent, others of various hues. Fish of all sizes, shapes, and colours are seen; the voracious shark eagerly pursuing his prey, the turtle rolling along in his unwieldy shell, and sea-snakes of large dimensions and of glowing lustre may be traced in their rapid gliding movements as clearly as if they were flying in the air.

The *Gulf of Carpentaria* extends inland 600 miles, and has a breadth of 400 miles;

its coast line measures about 900 miles, including the bays and windings. The shores are almost invariably low, and the water everywhere shallow towards the edge, with a bottom of blue mud or sand. The greatest depth of soundings in crossing the southern part of the gulf from coast to coast, is fifteen fathoms; fine, dark, sandy, mud bottom. The lee shores are covered with mangroves, behind which water is often seen. Trees (palms of considerable height) are found on some elevated places, but barrenness is the general character of the surface. Flinders says that for the space of 600 miles, between Endeavour Strait and a range of hills on the main land, west of Wellesley Island, at the bottom of the gulf, no portion of the coast is higher than the mast-head of a ship; some part of Wellesley Island is more elevated than that of the main, but the highest does not rise 150 feet. The general appearance of the head of the gulf is that of a low mangrove shore, ten to thirty feet high, over which the interior is not visible from the offing. Nearly 200 miles of the south-eastern coast were minutely examined by the surveying officers of H.M.S. *Beagle*; twenty-six inlets were discovered, of which two proved to be rivers, whilst three more were nearly as promising.

Van Diemen's River, on the south-east coast of the gulf, is considered by Stokes to be an inlet rather than a river, but its waters appear to be less salt at low tide. The bar, three-quarters of a mile off the mouth of the inlet, has only two feet on it at low water, but the first reaches of the inlet or river have a depth of one and a half to three fathoms, and a width of 200 to 300 yards; the stream then becomes much narrower, and so tortuous, that its windings of twenty-seven miles only brought the explorers to eight miles, in a 60° S.E. direction, from the entrance; then dividing, one branch trends south, and the other east, each being about fifteen yards wide and two feet deep; the water was quite salt, and the mangroves were growing on either side at the point where the examination was abandoned. At the mouth of the river the coast bears the same low, sandy, or mangrove-clad appearance noticeable in other portions of the eastern coast of the Gulf of Carpentaria; the highest elevation seen was six miles from the entrance, where the banks attained an elevation of ten feet, the rise being marked by a growth of eucalypti of tolerable size; elsewhere the banks rose scarcely three feet

above high-water level, and were generally fringed with mangroves, behind which, in many instances, extensive clear flats were observed, reaching occasionally from the sides of the inlet toward the upper parts, and when seen in June, they were the resort of large flights of the bronze-winged pigeon.

Flinder's River, on the south shore of the Gulf, was discovered and explored by captain Stokes, to the extent of thirty miles to 17° 51' S. lat., in a general S. by E. $\frac{1}{4}$ E. direction from the entrance. It separated into two branches, one taking an easterly, and the other a southerly direction. After passing the sea-bank, the depth was one fathom; further inland, the river expands into a beautiful sheet of water, a quarter of a mile in width, but only three feet in depth, here and there diversified by low islets, clad with emerald verdure, with, on the other hand, green and grassy cliffs, sloping almost imperceptibly to the stream; anon the eastern bank becomes steep, overhanging and clothed with a mass of luxuriant creepers, whilst the opposite side presents a low woody patch, partly immersed by the glassy, lake-like waters of the river. At the bifurcation of the stream, a rocky formation of a red ferruginous character was observed. The country appeared to abound in rose-coloured cockatoos, whistling ducks, and vampyres.

The Albert River, discovered by the surveyors of H.M.S. *Beagle*, also disembogues in the southern part of the Gulf, in 17° 35' 10" S. lat., and 7° 35' 50" E. of Port Essington. It has a bar with thirteen to seventeen feet of water, and is navigable for vessels of a draught suited to the bar for thirteen miles, and within five of where the saltness of the stream ceases. The opening of the river for three miles is almost straight, in a south by west direction, with a width of 200 yards, and a depth of two and-a-half to five fathoms; the banks fringed with mangroves. Eight miles from the mouth are two islands, and two others four miles further up, where the breadth is nearly a mile, and the depth two fathoms. The river winds tortuously to the south and east, through a rising country, with occasional grassy plains, a soil of a light brown colour, void of sand, of considerable depth, and thickly wooded. Further inland the country becomes perceptibly higher,—the scenery extremely picturesque, tall palm trees and bamboos, fifty feet high, rise from the thick foliage on the lower slope of the banks; and at Hope Reach, a magnificent sheet of water

is bounded on either bank by extensive grassy plains, dotted with 'woodland isles' springing from a rich light-coloured mould. The river now becomes a shallow, rapid stream, and in $17^{\circ} 58' 30''$ S. lat., $129^{\circ} 25'$ E. long., the country is most inviting; the line of verdure pointing to the south over the "Plains of Promise."

Bountiful Islands form the eastern part of the Wellesley group on the south-west coast of the Carpentaria Gulf. They were so named by Flinders on account of the plentiful supply of turtle found there. He mentions having obtained from one turtle 1,940 eggs. Near the islands was noticed by Stokes, a "shrubby, thick, compact sort of sea-weed," also seen on the parts of the north-west coast frequented by the turtle, and which is probably their food. The islands are one mile and-a-half from each other; the larger and more northerly is two miles and-a-half long by three-quarters wide, with cliffs on the south-east side of sand and ironstone formation, the latter predominating.

Sweers Island, south of the Bountiful Islands, bounded by low dark cliffs on the north-east, is very woody, and was found to be literally covered with locusts.

Bentinck Island has an extent of ten miles either way, is slightly elevated, thickly wooded, and abounds in several sorts of winged game.

Point Inscription (so called from a tree being found by Stokes, with a notice of Flinders' visit in the *Investigator* forty years previous cut thereon) is in $17^{\circ} 6' 50''$ and $7^{\circ} 28' 30''$ E. of Port Essington.

The west shore of the Gulf of Carpentaria is somewhat higher than the east shore, and from Limmen's Bight to the latitude of Groote Eyland, is lined by a range of low hills. Proceeding to the northward the coast becomes irregular and broken, consisting chiefly of primitive rocks, the upper part of the hills being composed of a reddish sandstone. The general range of the coast, from Limmen's Bight to Cape Arnhem, is from south-west to north-east; and three conspicuous islands at the north-west entrance of the Gulf of Carpentaria have the same general direction. Low land extends westward to *Castlereagh Bay* and *Goulburn's Island*. The *Liverpool River*, on this part of the coast, is four miles wide at its mouth, with a tortuous and rather shallow stream, which has been traced inland to about forty miles from the coast, through a country

whose general elevation does not exceed more than three feet above high-water mark; the banks low, muddy, and thickly wooded. West of Goulburn Island the coast is more broken and irregular, but the elevation is inconsiderable, *Coburg Peninsula* not being more than 150 feet above the sea, and the hills about 300 to 400 feet in the background between the Liverpool and Alligator rivers. Some of them are remarkable for their linear and nearly horizontal outline, the tops resembling that of a roof or a haycock, the transverse section being angular, and the horizontal top an edge. The Cobourg Peninsula projects N.N.W. from the main land of Australia for a distance of fifty miles, the greatest breadth being fifteen miles, and the narrowest, five miles.

Port Essington, in $11^{\circ} 6'$ S. lat., and $132^{\circ} 12'$ E. long., is seven miles wide between Point Smith on the east side, and Vashon head on the west. The port extends about eighteen miles in a S.S.E. $\frac{1}{2}$ E. direction, with a depth of twelve to five fathoms. At the southern end it forms three spacious and secure harbours, each of them extending inwards three miles, with a depth of two and five fathom soundings; mud and sand. The shores of Port Essington consist of little bays and sandy beaches, alternating with bold cliffs and steep clay-banks; inland, a continuous forest of trees, occasionally relieved by undulating or round hills, with an elevation of 100 to 200 feet above the sea. At Port Essington, the sides of the harbour are formed by several low rocky headlands, and cliffs of red or white sandstone and ironstone, twenty to thirty feet high: between the cliffs are shallow coves, backed by mangrove swamps, and behind a low country, with a sombre wood of low eucalyptic trees. *Victoria* (a recently-formed British station) consists of a few wooden houses, on a flat piece of land forty or fifty feet above the level of the sea, on the west side of the harbour. The soil in and around the settlement is poor, and except in the swamps and lowest hollows, composed of the detritus of sand and ironstone, without any apparent mixture of vegetable soil. Large tracts were seen with scarcely a blade of grass, and little or no undergrowth, and the forest, or "bush," looked like a badly-kept gravel-walk, on which a few small trees were growing. When visited by H.M.S. *Fly*, in August, 1843, there was not grass enough, within a mile of the settlement, to feed a single cow. The heat at Port

Essington is very great. In January, 1845, the thermometer stood often as high as 96° at eight a.m., and 100° and upwards at noon. For four years after the settlement was established, captain M'Arthur, and the marines stationed there found it healthy; but the rainy season, which commenced so early as October, 1842, and lasted to April, 1843, is supposed to have caused great sickness, which has continued, with more or less severity, ever since; and the detachment of fifty marines have experienced considerable diminution of numbers, and been several times relieved. It was found to be impossible to keep a force fit for active service: in January, 1850, there were only two or three marines fit for duty. The attempted formation of a settlement at Port Essington has been unsuccessful. Mr. Jukes, who has visited many of the colonies, and whose unprejudiced mind entitle his remarks to considerable weight, visited Port Essington four times, at different periods of the year, and thus strongly expresses his opinion, which he supports by various arguments:—"I believe it to be utterly worthless as a colony, or as an agricultural or commercial possession." It is not adapted for a harbour of refuge, as it is 600 miles from the extreme limits of the sea, where wrecks are most likely to occur; namely, the coral sea and the eastern side of Torres Straits. Low land and shoals, to the east of the harbour, render it difficult to find, and dangerous to approach; and the settlement of *Victoria*, sixteen miles up the harbour, would, in addition to the deviation from the ordinary route of the fair or trade wind, ensure any passing vessel a detention of at least two days to look in there. Added to this, the climate is decidedly unhealthy; many valuable lives have been lost, and the government have consequently resolved to withdraw the men and officers stationed at Port Essington, which, in 1850 was done.

Raffles Bay, in $11^{\circ} 12'$ S. lat., $132^{\circ} 26'$ E. long., thirteen miles east of Port Essington, is of a circular form, with a diameter of three miles, and shallow depth, varying from three to four fathoms. The coast about *Port Raffles* is exceedingly low, and has been compared to the coast of Orissa in Bengal, and also to that of Demerara; there are few patches of good soil, and it would seem ill adapted for an agricultural or pastoral settlement. The British colony, established here in 1827, was abandoned in 1829, on account of its unhealthiness, the hostility of

the natives, and the disappointment occasioned by the Malays not coming on fishing expeditions as was expected.

Melville Island, separated from the north coast of Australia by *Clarence Strait*, which is about fifteen miles wide, lies between the parallels of $11^{\circ} 8'$ and $11^{\circ} 56'$ S. lat., and the meridians of $130^{\circ} 30'$ and $131^{\circ} 34'$ E. long., five degrees west of the Gulf of Carpentaria, and distant 330 miles from the island of Timor in the Eastern Archipelago. The extreme length from *Cape Van Diemen* to *Cape Keith* is seventy-five miles; the extreme breadth from *Cape Radford* on the north to *Cape Gambier* on the south is thirty-seven miles. The surface of the island is low and gently undulating, averaging from twenty to seventy feet above the sea, except on the south coast, where some peaks have an altitude of 250 feet. The north line of coast is low, and lined with mangroves; the east, west, and south sides more elevated, sometimes forming abrupt cliffs or clay banks. The interior consists of almost impenetrable mangrove swamps and close forests, the largest timber measuring sixty feet of stem, with a diameter of three feet. The soil, so far as ascertained, is poor. In 1824, a British settlement was formed on the island in *Apsley Strait*, but it was abandoned in 1829.

Bathurst Island, separated from Melville Island by Apsley Strait, is of a triangular shape, each side measuring about forty miles. It is similar in appearance and production to its neighbouring island. The approach to Apsley Strait is intricate, beset with shoals, and notwithstanding an excellent survey made by major Campbell, of Her Majesty's 57th regiment, formerly commandant of Melville Island, too dangerous for general navigation. Apsley Strait, and the creeks and rivers on the north coast of Australia, abound with alligators of fourteen to twenty feet in length, and sea and land snakes ten to twelve feet long.

Adelaide River, seventy miles from Port Essington, falls into *Adam's Bay*. *Clarence Strait* has a depth of four fathoms where it empties itself into the bay. Captains Wickham and Stokes, R.N., traced the river in a southerly direction nearly eighty miles, and found it navigable for fifty miles for a vessel of 400 tons. The windings in some places are in the shape of the letter S. At that distance in $12^{\circ} 57'$ S. lat., $131^{\circ} 19'$ E. long., the stream became very narrow, and divided into two branches, one proceeding in a southerly and the other in an easterly direc-

tion. For thirty miles of the upper course of the Adelaide the water was fresh, and the banks, except at the point of separation, not more than five feet above the level of the river. A mangrove swamp occupied the country for fifteen miles towards the mouth, but beyond there a fine prairie was observed, with a soil of light-coloured mould, dotted here and there with "islands of timber," and on the banks a thick jungle of bamboo, some of which attained the extraordinary height of sixty to eighty feet.

Port Darwin, in $12^{\circ} 27' 45''$ S. lat., $1^{\circ} 19' 40''$ E. of Port Essington, has an entrance between white cliffy projections, three miles distant from each other; although of considerable size, it has much shoal water, especially on the west side. The shore is low and sandy, sprinkled with brush-wood, and has singular-looking detached peaks in the background.

Point Pearce, Treachery Bay, where captain Stokes was speared and nearly killed by the natives, is in $14^{\circ} 25' 50''$ N. lat., $2^{\circ} 49'$ W. of Port Essington. It has wooded cliffs of a reddish hue, from the quantity of iron in the rocks.

The Victoria River, one of the largest streams in Australia communicating with the ocean, was discovered by captains Wickham and Stokes, in September, 1839; and explored, with great perseverance, by the latter-named officer. The mouth of the river is in $14^{\circ} 20'$ S. lat., $129^{\circ} 21'$ E. long., between Turtle and Pearce Points, in Queen's Channel, which is there twenty-six miles wide.* The river was traced to a distance of 140 miles from the sea; for the first thirty miles of the upward course its character undergoes little change; the left side continues bold, with the exception of a few extensive flats sometimes overflowed, and a remarkable rocky elevation about twenty-five miles from the mouth, to which the name of *the Fort* was given, on account of its bastion-like appearance (subsequently called Table Hill in the chart). The right shore continues low, studded with mangroves, and subject to overflows. At thirty-five miles from the embouche, the scenery entirely changes; the river runs between a precipitous rocky range of compact sandstone, rising to a height of 700 to 800 feet, and is here sometimes two miles wide, having in several places a depth of twenty fathoms, and rushing with a velocity of six miles an

* *Discoveries in Australia*; by Captain Stokes, R.N.; vol. 2, p. 113.

hour. It continues a rapid stream through this defile for about thirty miles, and is subsequently found flowing slowly across a rich alluvial plain fifteen miles in width. Beyond this plain the Victoria passes through another but less elevated gorge, viz., 400 to 500 feet, whose elevation increases as the river is ascended, and the width, depth, and velocity of the stream decreases. In proportion as the high land or banks approached the channel on one shore, in the same degree it was found to recede from the opposite side; and supposing the whole valley to have been at one time filled with water, the breadth above Reach Hopeless and at Mount Regret must have been from three to five miles. When captain Stokes reluctantly quitted the further exploration for want of provisions, and from the illness of one of his men, with whom it was necessary to return to H.M.S. *Beagle*, he could perceive, "far, far away, the green and glistening valleys through which it wandered:" he felt assured "of the constant presence of a large body of water," and convinced that the Victoria "will afford a certain pathway far into the centre of Australia." The coast to the E.N.E. of the mouth of the Victoria consists of vast ranges strewn over with huge blocks of sandstone; chasms, ravines, and thirsty stone valleys yawn on every side; and all around is broken, rugged, and arid, as if the curse of sterility had fallen on the land, presenting a strong contrast with the country seen up the Victoria river.

Cambridge Gulf, a swampy arm of the sea, extends inland eighty miles in a southerly direction. In its vicinity, the general flatness of the country to the northward and eastward, as far as Cape Wessil, a distance of 600 miles, ceases, and is succeeded by irregular ranges of detached sandstone hills, which rise abruptly from extensive plains of low and level land. From Cape Londonderry to Cape Voltaire the country is of moderate elevation, with mountains in the back-ground. The coast has a direction from north-east to south-west, with numerous indentations, and the adjoining sea is studded with sandstone islands. York Sound, a spacious bay, is bounded by precipitous rocks from 100 to 200 feet in height. It receives two rivers, so far as known, of small dimensions. One of the largest inlets on the north-west coast, termed *Prince Regent's River*, is about thirty miles to the south-west of York Sound. The course is

almost rectilinear for fifty miles in a south-east direction; its rapid passage over stone blocks has prevented its further exploration: but at that distance from the sea it is 250 yards wide, with abrupt banks of reddish sandstone, 200 to 400 feet high. *St. George's Basin*, in Prince Regent's River, is a noble sheet of water, ten or twelve miles across: on its south side deep inlets run up into a low marshy country leading to fertile districts; on the north bank lofty mountains, crowned with castellated summits, rear their sterile heads over the broad waters. Captain Grey, in his very interesting *Journals of two Expeditions of Discovery in North-West and West Australia*, says, that the most remarkable geographical feature in North-West Australia is a high range of mountains, running N.N.E. and S.S.W., (named by him Stephen's range,) from which several branches are thrown off:—1st. One between Roe's River on the north, and Prince Regent's River on the south; 2nd. Macdonald's range, that throws off streams to Prince Regent's River on the north, and to Glenelg River on the south; 3rd. Whateley's range, which gives forth streams to Glenelg River on the north, and to the low country, behind Collier's Bay and Dampier's Land on the south. These branch ranges, as well as the primary one, are composed of ancient sandstone, deposited in nearly horizontal strata, or of basaltic rocks, which are only visible in certain places, and are fully developed in that part of Stephen's range which lies behind Collier Bay, and in the low ground near Glenelg River. The extent of Stephen's range captain Grey was not able to ascertain; but it contains within it the sources of Roe's River, Prince Regent's, and Glenelg rivers, most probably the Fitzroy, those that run into Cambridge Gulf, and perhaps others that have their embouchures between Cambridge and Admiralty Gulfs. Governor Grey does not consider this range very elevated; he estimated the highest parts of the table land of Macdonald's range at 1,400 feet above the sea, and the altitude of the farthest point reached of Stephen's range at 2,500 to 3,000 feet. The rivers on the north-west coast resemble those of the south-east part of Australia. They rise at no great distance from the sea; near their sources are mountain torrents; and, in the low lands, streams, with slow currents, flow through extensive and fertile valleys or plains, subject to considerable inundations. The valleys of the north-west coast are of

two descriptions—those which are almost ravines, enclosed on either side by inaccessible cliffs, or valleys of great width, bordered by fertile and often extensive plains, which occur where the basaltic rocks are developed. One valley in which governor Grey and his party encamped, had a main width of only 147 feet; and, half a mile from the sea, the rocky precipitous cliffs rose 138 feet. The sandstone formation is intersected, in all directions, by valleys of this kind, which are seldom more than two or three miles apart, while the top of the range between them is a table land, divided by lateral valleys, and gently rising towards the interior. Seawards they all terminate in salt-water creeks, having the same narrow, rocky, and precipitous character. The richest land is found upon the valleys of the second class, where the streams flow through wide plains, and have their margins thinly wooded. Fine vegetable mould was seen by captain Grey, ten or twelve feet in thickness.

The Gascoyne River is apparently one immense delta of alluvial soil covered with gently sloping grassy elevations, which can scarcely be called hills, and in the valleys between them are many fresh water lagoons, which rest upon a clay soil. The country is lightly timbered, and well adapted for agricultural or pastoral purposes, but especially for the growth of cotton and sugar.

Further information relative to the north-west coast is very imperfect.

The shore in the neighbourhood of *Hanover Bay* is formed of enormous granite boulders, which render it hardly accessible except at high water. A red sandstone platform is abruptly intersected by singular looking valleys; the precipitous cliffs at first approach each other, and then recede inland in a southerly direction. It was from one of these valleys that captain Grey met so many obstacles in his attempt to penetrate the interior. Hanover Bay is a fine harbour, but not so easy of access from seaward as the contiguous haven of *Port George the Fourth*; but both afford safe anchorage, abundance of fresh water, plenty of fuel, and a fine beach for the seine. Fish, however, are scarce on the north-west coast. The numerous islands and reefs which skirt the shore, greatly diminish the value of these fine harbours.

Red Island, a good guide to the entrance to Hanover Bay or Port George the Fourth, is small, rocky, of no great elevation, with precipitous sides and a clump of trees in the centre. The coast off *Entrance Island* (Port

George the Fourth) is arid and barren, with a line of lofty cliffs occasionally broken by sandy beaches, and a back-ground of rocky sandstone hills very thinly wooded. Generally speaking, the north-west coast is well watered, and although the country around Hanover Bay is very rocky, it has some rich and beautiful vallies.

Doubtful Bay, in $16^{\circ} 4' S.$ lat., has a table land, of sandstone formation, 900 feet above the waters of the bay. The prospect from the summit is cheerless; similar ranges of less height meet the eye in every direction branching towards the interior; those overlooking the eastern shore of the bay are from 600 to 700 feet high. Captain Stokes doubts that any land, as estimated by captain Grey, of two to three thousand feet high, exists within thirty miles of the height on which he stood. Captain King mentions hills of from three to four hundred feet high, at a distance of fifteen miles. It is uncertain whether this bay receives the waters of any river. Mr. Helpman, who explored the south shore of the bay, ascended a high hill, and "feasted his eyes on a most luxuriant well watered country," bearing E.S.E. about eight miles, lying at the eastern foot of a remarkable peak, visible from Port George the Fourth. To the north-east are the *Macdonald range of hills*, which are estimated by captain Grey at 1,400 feet high; Mr. Helpman, however, says they are "apparently of no great elevation." Part of this rich land stretches to within five miles of the south-east part of *Brecknock Harbour*, which is six miles deep, extends gradually from a width of one and three-quarter miles at the entrance, to five at the head, and has a depth of water varying from five to seven fathoms, with a soft muddy bottom. Rocks of transition origin were met with in this neighbourhood, leading to the inference that the soil is of better quality than that formed by the decomposition of sandstone of recent formation. Captain Stokes found, on landing in the neighbourhood at mid-day, "the air quite perfumed with the fragrance of different gums."

The *Montgomery Islands* (so called by captain King, after the zealous and enterprising surgeon of his ship, who here received a spear wound from the natives, which nearly proved fatal) consist of six small rocky islets, resting on an extensive coral flat; the eastern and largest is seventy feet high, in $15^{\circ} 49' S.$ lat. They form good landmarks for the entrance to *Collier's Bay* (distant eighty

miles from Port George the Fourth), which is twenty miles wide at the commencement, and narrows to six near the head of the bay, fifteen miles from *Eagle Point* in $16^{\circ} 10' S.$ lat. The eastern shore has a south and a south by west direction, formed of shallow bights, flanked by hills of moderate elevation. The western shore runs in a north-west by west direction, has a straight rocky coast, over which a range of barren heights rise abruptly.

King's Sound is a deep inlet on its eastern shore; the face of the country is intersected by deep ravines, and covered with huge blocks of coarse sandstone. From the top of one of the highest hills, captain Stokes reckoned more than eighty islands in this portion of the adjacent archipelago. He crossed two deep bays in the sound—the first three and the second four and a half miles wide—both affording good anchorage, but inaccessible from the barrier reefs and islets across their mouths. These bays and the ranges of adjoining hills trended E.S.E. At a distance of seventeen miles in a N.N.E. direction from the ship in $16^{\circ} 24' 30'' S.$ lat., captain Stokes found the same huge masses of rock, and from the summit of one of them observed yet more numerous islands on the coast, which is indented with bays two to five miles in width, containing long narrow islands invariably trending in an E.S.E. direction. The bays generally subsided in a S.S.W. direction. The scenery at *Point Osborne*, in King's Sound, is very wild; on the north side of the Sound, distant twenty-one miles is *Point Cunningham* and *Carlisle Head*, which appear like two high square-looking islands. The eastern shore of King's Sound, at forty miles from Port Osborne in a direct line, and seventy by the winding course of the main land, forms eight bays, varying in depth three to eight miles, and in width two to five: their general trend is E.S.E. Many islets skirt their shores, and almost more than can be counted fill their mouths.

The *Fitzroy River*, which disembogues into King's Sound, was traced by captains Wickham and Stokes for ninety miles; in their opinion, it offers a means of access to the interior, by which future explorers may further improve our geographical knowledge of this part of Australia. The country near the embouche of the river is one vast unbroken level, covered with strong, wiry grass, and intersected by numerous water-courses. The general direction of the Fitzroy is south;

at a few miles from the coast the width suddenly contracts from three miles to one; the banks low and covered with a coarse grass. Further south low grassy islets extend across the river, and leave only confined and shallow channels. Passing these islets at a distance of nearly thirty miles from the sea, the stream again widens to 400 or 500 yards, with a depth of twelve feet at low water. The country then begins to improve; the eastern bank becomes thickly wooded, and subsequently the western is seen clothed with verdure. The course of the river now becomes very tortuous; sometimes in a S.W. by W. direction, then to S.E., round to W.N.W.; next three reaches trending S.S.W., S.W., and S., from a mile to half a mile in length, the depth of the stream varying from one to fourteen feet; width from three to five hundred yards. In the deep reaches were the decaying wrecks of large trees, indicating great inundations. The east bank has here an elevation of twenty feet, is covered with long grass, and thickly wooded with a luxuriant growth of the white eucalyptus. From the *total absence of every appearance of animal life*, an air of solemn tranquillity is impressed upon the scene. Captain Stokes climbed the highest tree on the eastern bank, and the landscape presented to his view was an almost uninterrupted level; open woodlands, with here and there grassy spots, were its prevailing features. Proceeding further, the explorers entered a lake-like reach of the river, trending south for a mile and a quarter, the breadth about one hundred yards, and the depth in many places of twelve feet (twice that usually found in some of the lower reaches), and no current. A coarse red-grained sandstone, with fragments of quartz, were found on the west bank for nearly a quarter of a mile along the edge of the water; over many parts of it was a coating of a dark and metallic appearance, about three inches thick, and the surface in places presented a glazed or smelted appearance. After passing this canal, the Fitzroy divides into two branches, one having an E.S.E., and the other S.S.E. direction; both are with difficulty navigated by boats, and are deep reaches connected by shallows, and subject to inundations, during which the water rises to a height of twenty feet. The country on the westward, as far as could be seen from a high tree, is open, with clumps of small trees, and green grassy patches between them. In other directions it is densely wooded, and on the eastward the trees are large. The ex-

ploration was given up in $17^{\circ} 44'$ S. lat., $124^{\circ} 34'$ E. long., the river having been traced twenty-two miles in a general S.S.W. direction, and ninety miles from the coast line. At this point, the channel of the southerly branch was found to be wholly choked with islets and sunken trees; the banks were twenty feet high, and covered with grass; partially broken or washed down, they disclosed to view a rich alluvial soil, nearly two feet deep. The trees seen were chiefly two species of palm, three of the eucalypti, stunted Banksia, acacia, and a singular tree with a rough bark like the elm, and a deep dark green foliage.

The Buccaneer's Archipelago consists of many islets, skirting the coast between Prince Regent's inlet and King's Sound. The land in the interior is rugged and lofty, and the shore much indented with several fine harbours. The outline of the coast about Cape Leveque itself is low, waving, and rounded, and the cliffs, as is generally the case on the north and north-west parts of Australia, of a reddish hue; but on the south of the high ground at Cape Leveque, the stoney cliffs are succeeded by a long tract which appears to consist of low sandy land, fronted by extensive shoals.

Dampier's Archipelago, and the adjacent coast, is still but partially surveyed: the shore is rugged and broken.

Depuch Island, on the north-west coast, in $20^{\circ} 37'$ S., $117^{\circ} 44'$ E., presents a singular contrast with the low, flat shores of the main land, from which it is only a mile distant. It is of a circular form, eight miles in circumference, and is composed of a vast pile of large blocks of greenstone, heaped up in rugged and irregular masses, to the height of 514 feet. It has much the appearance of basalt: here and there, near the summit, are a few stunted green trees; but, generally speaking, the island is devoid of vegetation, and very different from the other low islands of Forester's group, of which it is the chief.

From *Cape Preston*, in 21° S. lat., to Exmouth Gulf, the coast is low and sandy, and does not exhibit any prominences. The west coast of Exmouth Gulf is formed by a promontory of level land, terminating in the *North-west Cape*: from thence to the south-west, as far as Cape Cuvier, the general height of the coast is 400 to 500 feet. No mountains are visible from the coast-range.

Kok's Island, in the *Geographe Channel*, is very remarkable; nearly a table land, about a quarter of a mile in length, terminating in

low cliffs at each extremity, and on the summit of this table land are several large rocks, which look like the remains of pillars. *Bernier* island consists of sandy dunes, arranged in right lines, lying south-east and north-west—the direction of the prevailing winds. There are no trees or grass. *Dorre* is similar to *Bernier*, only the surface is higher.

Shark's Bay, and the continuous western and southern shores of Australia, will be described in the respective books of Western and Southern Australia.

I have now endeavoured to present a connected view of the tropical coast-line, including the north-east, north, and north-west shores of the island continent; a few general observations on Geology and Climate will follow an outline of the—

PROGRESS OF INLAND DISCOVERY.—It would far exceed the limits of the present work to enter into a detail of the toilsome and perilous explorations of the brave adventurers, who, at the imminent hazard, and, in too many instances, at the sacrifice of their lives, have acquired the yet imperfect information we possess concerning the interior of this vast continent. It must therefore suffice to enumerate the most important of these expeditions; dwelling more especially on those which have led to practical results. From the very commencement of the settlement at Port Jackson, strenuous endeavours appear to have been made by the colonists to penetrate beyond the mountain-belt, already described as forming the leading feature in the physical aspect of Australia. The efforts of Messrs. Bass, Caley, Barrallier, and others, were totally ineffectual, and the formidable barrier remained unpassed until the year 1813, when the country was visited by a fearful drought; the land from the sea-coast to the base of the hills was burnt up; the secondary water-courses entirely failed, and the cattle, hemmed in on all sides, died in great numbers for want of pasturage. The colonists were in despair, when three enterprising individuals, Messrs. Blaxland, Wentworth, and Lawson, united in making one more attempt to find a pass over the *Blue Mountain range*. They ascended the mountains near the Grose River (a tributary of the Hawkesbury), and by keeping steadily in view the fall of the waters into the Warragumba, on the one side, and into the Grose, on the other, which no previous explorer had thought of doing, they maintained their position on a main range, and notwithstanding

its intricate windings, eventually penetrated to a distance of twenty-five geographical miles, due west from the Nepean river to a terminating point in those mountains, whence the eyes of the enterprising adventurers were gladdened by the prospect of a grassy and well watered vale, extending apparently some miles to the westward. On their return, Mr. W. Evans, the assistant surveyor, was despatched by the same route, and the Downs of Bathurst, the river Macquarie, and the Lachlan were shortly afterwards discovered. In the following year a practicable line of road was constructed, by convict labour, over precipitous ridges, some parts of which rise 3,400 feet above the level of the sea. In the winter of 1817, an expedition headed by captain Oxley, then surveyor-general, and including Allan Cunningham, was sent to trace the Lachlan. Its long and tortuous course, during which it was not found to receive a single tributary, was followed through a flat inhospitable country, beyond the westernmost range of hills, to an interior, a dead level, forming a chain of plains, which appeared alone bounded by the horizon, whose ample surface bore evident proofs of being, in seasons of continued rains, extensively inundated. Over these Australian steppes Captain Oxley made his way, notwithstanding the slimy nature of their surface, and the distressed state of his horses, for about 100 miles to the westward of the last hill-like undulation of that part of the interior, when his progress was arrested, in 144° 30' E. long., by impassable morasses, the river having divided itself into several small channels, and its waters having become perfectly stagnant and unfit for use. In 1818, Captain Oxley started to explore the Macquarie downwards from Wellington Valley, but his persevering research was again attended with disappointment, the river being traced to a low marshy interior, where the country became "perfectly level," and the flooded river eluded further pursuit by spreading its waters far and wide. Into this expanse of shoal water captain Oxley descended in a boat, amidst reeds of such height, that having totally lost sight of land and trees, he was compelled to return to his party, whom he had left encamped on Mount Harris, a detached hill on the river's bank, elevated about 200 feet above the plain of the neighbouring flats. It being at that time perfectly impossible to penetrate the apparently unbounded morass, captain Oxley, unable to proceed in a westerly direction, determined to prosecute his discoveries east-

erly, in the parallel of $31^{\circ} 15'$, in which latitude his examination of the river had terminated. In his progress easterly, Liverpool plains, and a hilly, picturesque, and well watered country, were discovered. The expedition reached the coast at Port Macquarie, in $31^{\circ} 30'$ S. lat., and proceeded thence along the shore to Port Jackson. In the course of his journeys in 1817-18, captain Oxley advanced upwards of 500 miles beyond the Blue Mountains, and experienced one of the peculiar dangers attendant on Australian explorations, namely, the rapid rush of water from the mountains after heavy rains. In some instances the river column advances with terrific fury, sweeping every thing before it, and presenting the appalling prospect of a moving cataract, with an elevation of twenty to forty feet. Captain Oxley and his party were nearly overtaken by one of these inundations, but were providentially saved by being in the vicinity of a hill. Had he been near the margin of a stream, or in one of the vast savannahs, nothing could have preserved the gallant officer and his companions from destruction. — (*Vide* Allan Cunningham's paper in the *Geographical Society's Journal*, 1832).

About this time (1819) the Murrumbidgee was discovered, and minor excursions were immediately undertaken; but the fine open country watered by that river, and now called Brisbane Downs, was not known until 1823. Towards the close of the following year, Messrs. Hume and Hovell, two enterprising colonists, resolved upon attempting the exploration of the extensive and unknown tract of country situated between the colonized territory and Bass' Straits. They started from a stock station near Lake George, with the intention of pursuing a direct course to the south-west, expecting to arrive at the coast near Western Point, but a range of mountains, connected with those of the Murrumbidgee, through which, with burdened cattle, they found it impossible to penetrate, compelled them to follow an entirely west course, until, having passed the meridian of 148° , they were enabled to resume their original direction. In 36° S. lat., the party discovered a fine stream, flowing with considerable rapidity among the hills, which, from its depth and breadth, they had difficulty in fording. To this river they gave the name of *Hume*, but it was subsequently called the *Murray*, by captain Sturt, who explored its lower course. The travellers pursued their way over an undu-

lating, grassy, and well-watered country, and crossed two other streams, which they named the *Ovens* and the *Goulburn*. At length, having advanced nearly 400 miles beyond the remotest settlements, they emerged upon a sandy beach of the sea shore, considered by Mr. Hume to be that of Western Port, but which was, in reality, the north-eastern side of Port Phillip—half a degree to the westward of the point at which they supposed themselves to have arrived. In returning home, Messrs. Hume and Hovell travelled considerably to the westward of their outward-bound track, and on a much lower level, avoiding entirely the broken, hilly country which had previously proved so harassing to their cattle.

In 1827, an expedition was despatched under Allan Cunningham, to explore the country between Hunter's River, 32° S. lat., and Moreton Bay, in 27° S. lat. Crossing the dividing range to the westward, he skirted the eastern side of Liverpool Plains, bisected (what were afterwards found to be) the tributaries of the Darling, and discovered the extensive and valuable tracts of pastoral country now known as Darling Downs, Peel's, and Canning's Plains. In the following year, Mr. Cunningham succeeded in finding a practicable line of road through the mountain chain between Moreton Bay and Darling Downs, which the extent of intractable and difficult country between those plains and the Hunter rendered of great importance. Meanwhile, the extreme drought which had now (1828) continued upwards of three years, induced the local government to attempt again to ascertain the state of the interior. An exploring party, including Mr. Hume, under the direction of captain Sturt, (the present colonial secretary of South Australia,) proceeded to Mount Harris, on the Macquarie. Upon reaching the summit of that eminence, a prospect presented itself which formed a striking contrast to that beheld by captain Oxley, from the same spot, ten years before—the extensive morass into which the surveyor-general had descended in a boat, being now transformed into "a large and blasted plain," parched, by extreme heat, into deep and dangerous clefts. About twenty-eight miles below Mount Harris, the Macquarie was found to terminate, having no longer a continuous bed, and the plains or steppes commence; each of them having a lagoon-like channel, surrounded by high reeds which, in the rainy seasons, catch, and for a while

detain the spreading waters, until a slight declivity, giving them a fresh impetus, they arrive at a second channel, and thence at a third, until a considerable extent of country is laid under water—a space, fifty miles in length, and thirty miles in breadth, being subject to be thus deluged. Captain Sturt found another river (unfortunately for the explorers) of salt water, which he named the Darling, and whose course he traced for a considerable distance. In this expedition friendly and frequent intercourse was maintained with the natives, who were suffering fearfully from a cutaneous disease, caused by the badness of the water, and the intensity of the heat, which seemed alike oppressive to animal and vegetable life.

In 1829, captain Sturt proceeded from Sydney to explore the Murrumbidgee, and having traced it down its right bank to 34° 25' S. lat., 143° 57' E. long., he there launched a boat which he had conveyed overland, and another, which, by extraordinary energy and perseverance, had been built on the spot; from thence, advancing about twelve miles to the westward, he found the morasses into which the Lachlan had been traced, drained through a "large creek" into the Murrumbidgee; still pursuing a westerly course, through a level and monotonous country, a week's difficult and dangerous navigation was richly rewarded by the discovery of the junction of the diminished waters of the Murrumbidgee with "a broad and noble river," which he named the Murray, and commenced exploring; after following it in a westerly direction for about a hundred miles, the expedition arrived at a third confluence formed in 34° S. lat., 141° E. long., by a river flowing from the northeast, which notwithstanding the freshness of its waters, captain Sturt considered could be "no other than the Darling." Still pursuing the course of the Murray, captain Sturt passed another of its tributaries, which he named the Lindesay, and describes as a considerable stream, flowing in from the south-east. At length, after some intricate navigation, the forest-clad ridges which mark the eastern shore of the Gulf of St. Vincent became visible; the river in 139° 46' E. long. took a bend to the south, and was traced by the party to its entrance in the broad expanse of Lake Alexandrina or Victoria, which they traversed until stopped by the sand banks that separate it from the sea at Encounter Bay.

In 1831, a new impetus was given to internal exploration by the plausible state-

ments of a bush-ranger named George Clarke, sentenced to death for cattle-stealing, who, having for a considerable time taken refuge with the natives, had acquired a knowledge of their language. He declared that he had himself twice followed the course of a very large river, from the Liverpool Plains to the sea-coast; and the acting governor, sir Patrick Lindesay, was induced to despatch an expedition under the surveyor-general of the colony, then major, now lieutenant-colonel Sir T. L. Mitchell, to examine the country in a northerly direction. The result of the journey, although the convict's report proved untrue, was in other respects satisfactory, Major Mitchell having discovered the Darling to be a *fresh-water* river in 29° S. lat., where it receives the Nammoy, a fine stream watering an open pastoral country, but beyond this point, the murder of two men by the aborigines, and the failure of provisions, prevented the expedition from exploring. In 1835, major T. L. Mitchell proceeded about 300 miles up the river Darling, in a direct line. He found the country in general "unfit for any purpose," with the exception of "a strip of land near the river;" to the westward it resembled a desert. On the return of the expedition, by the dried up channel of the Bogan, in whose ponds, however, water was occasionally found, Mr. Richard Cunningham, having diverged from his companions, fell into the hands of the natives, by whom he was barbarously murdered. In 1836, Sir Thomas Mitchell, with a view of reaching the same point on the Darling which he had quitted the previous year, followed (in order to avoid the hostile tribes he had then encountered,) the empty bed of the Lachlan to the Murrumbidgee, and thence to the Murray, which he traced to its junction with the river rightly supposed by captain Sturt to be the Darling, which latter stream he examined sufficiently to identify. He then turned to the south, and tracing the course of the Murray upwards, discovered between it and the sea a fine, open, uninhabited, and well-watered country, averaging in extent 400 miles from east to west, and 250 from north to south, which he named Australia Felix, and in which the flourishing colony of Port Phillip, or Victoria, is now established. In 1837-8, lieutenant Grey (now governor of New Zealand,) and lieutenant Lushington undertook the examination of the country about Prince Regent's inlet, hoping to discover, in the vicinity of Dampier's Archipelago, some

river by means of which they might be enabled to penetrate the interior. Their expedition has been already adverted to in the description of the coast line, beyond which insurmountable obstacles prevented their exploring for a greater distance than sixty miles.

In 1840, useful surveys were made by Mr. Tyers between Port Phillip and the river Glenelg, and by Mr. Dixon at Moreton Bay; and, in the same year, Gipp's Land was discovered by the able geologist and indefatigable explorer, count Strezelecki, to whom we are indebted for a physical description of New South Wales and Van Diemen's Land, a work which, to quote the words of the author, "comprehends the fruits of five years of continual labour, during a tour of 7,000 miles on foot."

In June, 1840, Mr. Eyre, who had previously conducted several minor explorations, was intrusted by the colonists with the guidance of an expedition destined to attempt afresh to penetrate the interior, the plan of the intended journey being—first, to examine Lake Torrens, and then to proceed, as far as possible, in a northerly direction. Lake Torrens was found by Mr. Eyre to be completely girded by an outer ridge of sand, covered with salsolaceous plants, and with saline crusts, showing above the ground, at intervals, "the dry bed of the lake, coated completely over with a crust of salt, forming one unbroken sheet of pure white, and glittering brilliantly in the sun, but yielding to the foot, the bed of the lake below the surface being composed of a soft mud." The progress of the party in the intended direction was arrested, it being impossible either to cross the lake, from its boggy nature, or travel along its shores, from "the total absence of all fresh water, grass, or wood, whilst the very saline nature of the soil in the surrounding country, made even the rain-water salt, after lying an hour or two upon the ground." From the depôt near Mount Arden, close under the hills which form the continuation of Flinders' range, they therefore proceeded to their termination in 29° 20' S. lat., and reached a low and very level country, consisting of large stony plains, destitute of water, grass, or timber, varied by many small, flat-topped elevations, from 50 to 300 feet in height, composed almost wholly of a chalk substance, coated over on the upper surface by stones, or a sandy soil, and "presenting the appearance of having formed a table land that had been

washed to pieces by the violent action of water, and of which these fragments now remain."

Forcing his way through this dreary region, in three different directions, Mr. Eyre ascertained that "the whole of the low country round the termination of Flinders' range was completely surrounded by Lake Torrens, which, commencing not far from the head of Spencer's Gulf, takes a circuitous course of fully 400 miles, of an apparent breadth of from twenty to thirty miles, following the sweep of Flinders' range, and almost encircling it in the form of a horse-shoe." The extensive but disheartening prospect from Mount Serle first manifested to the enterprising party the impassable barrier by which they were hemmed in; but Mr. Eyre, considering this evidence insufficient, left his party, and proceeded, accompanied by a native boy, for about ninety miles farther, to a "low, haycock-like peak," rising "among broken fragments of table lands," similar to those previously seen near the lake to the north-west, which, naming Mount Hopeless, he ascended, and found his previous conviction entirely confirmed. He then returned to Port Lincoln for supplies, and, rejoining the party, (whom he sent forward to Streaky Bay,) set out to follow the coast line in a westerly direction, hoping to arrive at a practicable country to the north. In this, however, he entirely failed, although he succeeded in penetrating, accompanied by a native boy and a man driving a dray laden with provisions, within twelve miles of the head of the Great Bight, through low, flat lands, or a succession of sandy ridges, densely covered with a brush of eucalyptus, mimosa, salt-water, tea-tree, and other shrubs, with, here and there, a few isolated patches of open, grassy plains among the scrub, but no surface-water—not a water-course or pool of any description. This attempt cost the lives of the three best draught horses of the expedition, from fatigue and privation: but Mr. Eyre resolved to make another, taking with him only one of the native boys. He thus describes the sterile region they encountered:—

"Upon rounding the head of the bight, I met with a few friendly natives, who shewed me where both water and grass were to be procured, at the same time assuring me that inland there was neither fresh or salt water, hills, or timber, as far as they had ever been; that there was no more (either fresh water or grass) along the coast for ten of their days' journeys (probably 100 miles) or where the first break takes place in the long and continuous line of cliffs which

extend so far to the westward of the head of the Great Bight. Upon reaching these cliffs, I felt much disappointed, as I had long looked forward to some considerable and important change in the character of the country. There was, however, nothing very remarkable in their appearance, nor did the features of the country around undergo any material change. The cliffs themselves struck me as merely exhibiting the precipitous banks of an almost level country, of moderate elevation (300 or 400 feet), which the violent lash of the whole of the Southern Ocean was always acting upon and undermining. Their rock formation consists of various strata, the upper crust or surface being an oolitic lime; below this is an indented concrete mixture of sand, soil, small pebbles, and shells; beneath this appear immense masses of a coarse greyish limestone, of which by far the greater portion of the cliffs are composed; and immediately below these again is a narrow stripe of a whitish or rather cream-coloured substance, lying in horizontal strata, but which the impracticable nature of the cliffs did not allow me to examine. After riding for forty-five miles along their summits, I was in no case able to descend; their brinks were perfectly steep and overhanging, and in many places enormous masses appeared severed by deep cracks from the main land, and requiring but a touch to plunge them into the abyss below. As far as I have yet been along these, I have met with no indication of any portion of them being composed of chalk. Immediately along their summits, and for a few hundred yards back, very numerous pieces of pure flint are lying loosely scattered upon the surface of the limestone. Back from the sea, as far as the eye could reach, the country was level and generally open, with some low prickly bushes and salsolaceous plants growing upon it; here and there patches of the gum scrub shewed themselves, among which a few small grassy openings were interspersed. The whole of this tract was thickly covered by small land shells, about the size of snail shells, and in some instances resembling them in shape. There were no sudden depressions or abrupt elevations anywhere; neither hills, trees, or water were to be observed, nor was there the least indication of improvement or change in the general character of this desolate and forbidding region."

Mr. Eyre now renounced all hope of penetrating the interior, and breaking up his party, resolved to proceed with one man (who had acted as overseer) and the native boys overland to King George's Sound, which, after extreme perils and fatigue, borne with a cheerful endurance beyond all praise, he succeeded in reaching, accompanied by one only of the boys, the others having deserted him, while the unfortunate overseer had perished by the hands of the natives.

Passing over the interesting excursions of Mr. Frome to Lake Torrens, Messrs. Russell down the Condamine, and others, we arrive at the remarkable expedition conducted by captain Sturt, who left Adelaide in August, 1844, and started up the Darling with a view of tracing the Williorara (Laidley's Ponds) upwards. Instead of a mountain stream, the

Williorara proved to be a mere creek, conveying the backwaters of the Darling to Lakes Cawndilla and Minandichi, and his hopes of gaining entrance to the north-west interior along its banks were completely frustrated. The conduct of the natives at this place was very gratifying, and appears to have been chiefly owing to the favourable impression made by Mr. Eyre during a previous journey up the Darling. "To those exertions," says captain Sturt, "more than to our own prudence, must we ascribe the peaceful manner in which we have passed through the tribes." The aborigines warned captain Sturt most emphatically against attempting to cross the formidable ranges bordering the interior; telling him that they were covered with sharp pointed stones and great rocks, by which if they escaped being crushed, and gained the low country, they there would all perish from the heat and the want of water; moreover, they would find no wood to light a fire with—no grass for the cattle. This appalling picture which (allowing for their exaggerated mode of expression) experience proved to be in many respects correct, did not deter the gallant band, and having succeeded in discovering a practicable pass, they descended into the sterile region, beyond which the most strenuous and continuous efforts failed in enabling them to penetrate. Speaking of the dreary heights by which they were encircled, captain Sturt says, "they seemed to extend in a N.N.W. and S.S.E. direction, forming semicircles, like bays, and having all the appearance of a coast-line. Some prickly acacias in full blossom, a tree resembling a banksia, and a new polygonum, were found on the western slope." The expedition encamped in a sheltered glen on the 27th January, 1845, in 29° 40' 14" S. lat., 141° 30' E. long., and the tents were not again struck until the 14th of July following. They were fortunate in having here discovered an important creek, whose plentiful supply of water alone enabled them to remain so long in the heart of the desert. The sufferings endured by the whole party were excessive, and in July, Mr. Poole (the second in command) sank under them. The excursions made by captain Sturt in all directions, during his protracted sojourn in this "weary land," are too numerous to be even briefly detailed, but the following extracts from his despatches may afford the reader some idea of the dreary wilderness itself, and the perils and fatigue therein encountered:—

"We passed over a country of alternate sand hill and flats, until I struck upon a creek, beyond which the country was more open, and more subject to floods; we crossed over extensive plains, subject to deep inundations, but soon again got on sandhills. From them we descended to a stony plain of boundless extent, on which the horses left no track, and where no object was visible on the horizon from which to take bearings. Crossing these, we descended to flats, like a ploughed field, on which water had subsided, stretching to the north-east and south-west, farther than the range of vision, and without a blade of vegetation. From this we again ascended sand ridges, of most formidable description, and found the country to the west so bad where we attempted to penetrate in that direction, and surface water so scarce, that we were obliged to turn to the north at fifty miles, with only two small puddles to depend on. I struck a creek which I traced up sixty miles, when I got on a country of salt formation, covered with samphire, and other salsolaceous productions, with numbers of dry beds of lagoons, all white as snow, with salt. Passing this, we once more found ourselves among sand ridges, perfectly insurmountable, so close that the base of one touched the base of another—the whole country sand. The sand hills were of a fiery red, and they ran for miles and miles, in parallel rows, with points like the vanishing points of an avenue. But there was neither grass nor water to be found, and after trying all points of the compass, I gave it up and returned to the dépôt, after an absence of seven weeks, and a ride of 924 miles.

"The men were all knocked up, and the horses perfectly leg-weary; but I was dissatisfied with this journey, and there was but little time for hesitation. Therefore, after giving the animals six days' rest, I left the camp, taking with me two men and nine weeks' provisions, my objects being to try to enter the tropics, to ascertain if there were any water between me and the north coast, or if the desert extends to the very tropics. I went due north, and struck a most splendid creek at 123 miles from the dépôt. Here I had a thunder-storm that lasted half an hour, and left some surface water, dependent on which, I crossed it, and ran out 170 miles without finding a single channel for conveyance of water. I dug five wells, but had little hope of benefiting from them. I was at length brought up by a stony desert, that stretched before us in absolute boundlessness. Where there were sand-hills in it before, the sand-hills were now covered with stone, similar to the plain itself. I was in the centre of a dark and adamantine sea, without any object by which to steer my course. I was forty-one miles advanced in this gloomy region, and fifty-two from water. My horses had already been one day without water, and I could not hope to reach the other water under a day and a-half, including part of the night; yet I hesitated to turn back. It was an irresistible influence that drove me back, certainly contrary to my own inclinations. I was well-nigh too late. I lost three horses, but that was of no consequence on such an occasion. I got back to the creek, (Cooper's Creek) after having reached latitude $25^{\circ} 45'$, and longitude $139^{\circ} 13'$.

"From the creek on which I was, I had seen high and broken ranges to the north-east, and I now determined on examining them and the creek. I therefore went up the latter 120 miles, but I found that it was leading me away from the ranges, and I ultimately got to its termination, or rather head in

some extensive plains. The creek was as large as the Darling, and was flanked by a box-tree forest, in grassy land, to a considerable distance from its banks. Here I fell in with a numerous population, passing three or four small tribes every day; but the news of our kind treatment of them had spread through the country, and they evinced no alarm, but did all they could to serve us. From this point I turned westward, and taking up a branch creek, went towards the ranges; but I got into a terrible country, and found that the effects of refraction had deceived me with regard to the ranges, and that they were nothing but masses of sand or rock, 300 to 500 feet high. I saw that I was getting near the scene of the greatest turmoil, where the water passed over this dreary waste, and left the shivered fragments of mountains behind it. Here, again, water and grass failed me, and I was forced to abandon this trying task, being unable to contend against the season and country. I had done all that I could do, and had run the risk of being altogether cut off; indeed, so near was it, that I drained the last drop of mud—for it was not water—out of a pool that four weeks before was 150 yards broad, and 200 to 300 long. I lost two horses, and regretted them very much. I reached the dépôt, at length, having ridden 843 miles in five weeks, less three days.

"I had been exposed for twelve weeks to an excessive heat, had had insufficient food, had drunk loathsome water, and at length my iron constitution, under disappointment, anxiety, and weakness, gave way. The day I made the camp, I was eighteen hours on horseback; and when I dismounted, the spasmodic action of the muscles of my thighs was so violent as almost to throw me forward. I had, in truth, ridden all day in great pain. The next day, the scurvy, latent in me for eleven months, seized me. The muscles of my thighs contracted, and I was laid prostrate."

The expedition on their return were joined by a relief party at the junction of the Wilhiorara, and reached Adelaide on the 19th of January, 1846. In a brief summary of the information he had obtained, captain Sturt says:—

"The principal features of the interior are the sandy ridges or dunes, by which it is traversed from south to north, and the Great Stony Desert. That the whole region traversed was once submerged, there cannot, I think, be a doubt. Its salsolaceous productions, its sea-level, its want of trees of any size or growth, excepting on the banks of the creeks, sufficiently attest this; but whether the sandy ridges were thrown up simultaneously, or were successively formed by the joint effect of winds and a gradually retiring sea, or of winds alone, it is impossible to say. When I first crossed the Stony Desert, it appeared to me to have been the bed of a former current; and I felt satisfied that that conclusion was just when I crossed it at another point more than a degree from the first, and noticed the strong proof it exhibited of waters having at one time or other swept over it with irresistible fury. Whether the Stony Desert continues to any distance I cannot say, but my opinion is that it does, and that, as the lowest part of the interior, it receives all the waters falling inwards from the coast. Whether those waters are gradually lost by evaporation, or that they are carried to some still undiscovered sea, remains to be proved; but as it is

difficult for others to elucidate these things, I have thought myself called upon to throw every light I can on the probable character of the interior. All I can say is, that after having traversed a desert for 400 miles and failed to reach its northern limit, and after having found that it continued unaltered for four degrees of longitude, I cannot hope that it speedily closes in, either to the east or west."

With regard to the sandy dunes, he adds:—

"When we first observed them, their general direction was N.E. by N., but they gradually came round to, and settled at, eighteen degrees to the W. of N., or nearly N.N.W., and preserved that bearing with undeviating regularity for more than 300 miles. They occasionally ran for ninety miles without any break in them, and occurred in lines rising parallel to each other, at greater or less distances apart, and were divided by long flats."

During the weary months spent by captain Sturt and his brave party in this stony prison, an exploration of a very different character, and attended by very different results, was made by Dr. Leichardt, an intelligent and enterprising German, who, accompanied by seven persons, quitted Jimba, the farthest station on the Darling Downs, on the 1st of October, 1844, and after a toilsome and perilous journey of 1,800 miles' distance, during which above 3,000 miles were traversed in fourteen months, arrived at Port Essington with his party, excepting only the unfortunate Mr. Gilbert, who was killed by the natives when the expedition had nearly reached the north coast. The party followed the range of mountains which run nearly parallel to the east coast, until they reached the Gulf of Carpentaria, thence followed the coast to the westward, quitted it where it turns to the northward, and proceeded direct across the country. For the greater part of the journey they lived on dried beef, and such game as the country afforded: their sufferings and endurance were very great. In a series of lectures delivered by Dr. Leichardt in Sydney, he stated that in describing the country, according to its conformation and surface, the nature of its soil and vegetation, its supply of water, and its meteorological relations, the whole line of route might be divided very naturally into eight sections, each bearing a peculiar character. By this division it may be well to abide in the following account of the country.

The first section comprises the country between Darling Downs and Peak Range, with the Dawson and the Mackenzie, and is principally composed of sandstone, broken in several localities by basalt (whinstone) which forms either peaks, as Mount Aldis and

Mount Nicholson, or the spine of large ranges, as Expedition Range. The sandstone ranges are remarkable for their numerous and steep gullies, and for their scrubby vegetation. Dr. Leichardt found the country, with a few exceptions, well watered, and almost daily thunder storms cooled the air during the months of October, November, December, and January. Not only the high level land west of Darling Downs, which sloped almost imperceptibly to the south-west, but the valleys of the rivers and the sides of the mountains are covered with extensive scrub, principally composed of a species of acacia, which has received the name of bricklow (brigalow) from the squatters between the Severn and the Condamine. This shrub, or small tree, has a foliage of greyish-green colour, and grows so close, that it is impossible, or only with extreme difficulty, that a man on horseback can make his way through it. Along the hills which bound Palm-tree Creek and the Dawson at their junction, this scrub surrounds the Downs, which are frequently several miles in extent, and are rendered extremely picturesque by small copses of bricklow, fusanas, and bauhinia scattered over them, and often clustered round stately bottle-trees, the shady retreat of kangaroos and wallobis. These downs and plains are covered by various grasses and herbs; but the great prevalence of vervain induced Dr. Leichardt to name them the Vervain Plains. Looking from an eminence at the north-west side of Expedition Range, Dr. Leichardt describes the disheartening prospect of a valley nearly boundless to the eye, filled by an "almost uninterrupted sea of scrub," but the upper part of the Dawson—Palm-tree Creek, with its swampy lakes, its fine flats and noble palm-trees; part of Robinson's Creek, the Creek of Ruined Castles, and the country south-east of Expedition Range, he speaks of as so many places of rest and enjoyment, where the drooping hopes of the party brightened, and their energies revived. The banks of the Mackenzie, so far as they were traversed during this expedition, partook of the scrubby character of the country, but Dr. Leichardt saw reason to believe that the scrub ceased a little lower down, while its large supply of water led him to suppose it formed a considerable stream towards the sea-coast. The natives, when questioned concerning the course of the river, pointed to the north-east, and it probably disembogues at Broad Sound, in lat. 21° 30'. The country south-east of

Expedition Range, between Zamia Creek and Erythrina Creek, was found to be for a considerable distance to the eastward flat and openly timbered; affording good pasturage and tolerably well provided with water at the foot of the range. Its latitude was $24^{\circ} 50'$, but the course of its waters appeared to be directed either to Port Curtis or to Keppel Bay. Should a practicable communication with the sea-coast be discovered, there is little doubt of this district becoming valuable for pastoral purposes, and that even the good country of Castle Creek, Robinson's Creek, and Palm-tree Creek, will be accessible from this side.

The second section, comprising Peak Range, the Isaacks, and the Upper Suttor, presents a very different character from that just described. A long range of noble peaks, composed of dolomite, extends far to the W.N.W., and offers to the west and south-west a wide view over basaltic plains and open downs, alternating with low and openly-wooded ridges. To the eastward of those peaks, basaltic ridges, with gently undulating outlines, narrow plains, and abrupt sandstone ranges, form numerous valleys, along which creeks descend to the eastward, winding in their lower course through an immense level country, and joining the Isaacks, which comes from the north-west, and forms the chief outlet of the waters to the sea. An open forest covers the whole district, with the exception of some narrow belts of scrub along the Isaacks, and on the sandstone ranges; and the most luxuriant grass clothes not only the black soil of the basaltic plains, but the stiff flats and the sandy bergs along the creeks and river. The supply of water was found to be so little in proportion to the number or size of the channels, that on the magnificent downs of Peak Range, Dr. Leichardt and Mr. Calvert nearly perished for want of water. It was here, also, that they felt, for the last time, a hot wind from the west and south-west, coming from the yet unpenetrated interior. Water-holes existed, however, in the upper part of the eastern creeks, and swampy lagoons seemed to become numerous down the Isaacks, which is supposed to join the sea in Broad Sound, near the Mackenzie. The Upper Suttor partakes of the character of the Isaacks, from the head of which it is far more accessible than from its own lower course. Numerous flocks of emus roam over the beautiful country at the head of the Isaacks and the Suttor, and the immense tract

which spreads out round the foot of Coxen's Peak.

The third section, comprising the Lower Suttor, the Burdekin, and the country between the Burdekin and the Lynd, is characterised by its supply of running water, its primitive rocks, its limestone, its numerous ranges, and fine, open, well-grassed forest. Dr. Leichardt says, that several (comparatively) large tributaries, as the Cape, the Clarke, the Perry, drain, in all probability, extensive tracts of available country, while the elevation on the upper course of the Burdekin, renders the climate cooler than might be expected from the latitude. The basaltic table-land is exceedingly rich and beautiful. The open forest of narrow-leaved iron bark and box, on a sound and rather stony ground, alternates with plains of various extent, abundantly grassed, and watered by numerous brooks and springs. Large and deep lagoons lie scattered over the valley, or parallel to the river, whose course runs strongly over its sandy, pebbly, or rocky bed. But the approach to this interesting country is intercepted by a very mountainous region, and by deep creeks, over which more practicable roads will no doubt be found in the progress of colonisation. The basalt appears to have been broken by a still more recent eruption of lava, which expanding partly over it, has formed as wild and irregular fields of rock as ever covered the slopes of a volcano.

From the ridges and mountains which rose above the table land, the waters descend not only to the valley of the Burdekin in a south-east direction, but also to the north-east and to the westward. The country along the creeks is open and flat, so long as they pass over the table land; but when they descend their channels deepen, their banks become surrounded with steep ranges, and their beds are either formed by solid rock or covered with loose shingle and boulders, which render it impossible to travel within or along them.

The fourth section embraces the Lynd, the Mitchell, and the east coast of the Gulf of Carpentaria. The fall towards the level country, which forms a broad belt round the Gulf, is much more rapid than the ascent from the east coast; and the course of the Upper Lynd is much more mountainous and wild than that of the Upper Burdekin. The same succession of rocks, granite, talchiste, porphyry, and sandstone, are observable in descending to the Gulf, as at the east coast in ascending the table-land, but limestone was not met with (by Dr. Leichardt) on the

west side of York peninsula, though it appeared extensively developed on the Burdekin. Basalt has broken through the various rocks, but the level country is formed of a clayey ironstone, intermixed with grains of quartz, which extends all round the Gulf to Port Essington, and may be considered of newer formation. The Lynd was found to be joined by several running creeks, and well supplied with water during its whole course. The country was openly timbered and well grassed; and at the lower part of the Lynd and parallel to the Mitchell, very large and deep ponds were discovered, around which the pasture was particularly rich. The rivers within the tropics are almost all remarkable for the immense width of their beds, which are filled with sand, with the exception of those spots on which the naked rock crops out, and are often over-grown with small trees, whose number and size depend upon the frequency and strength of those volumes of water which occasionally sweep down. That of the Upper Lynd, for instance, was found to be covered with trees, whilst the bed of the Mitchell was entirely free from them, and water-marks were observed above the level of the bed—showing that a large body of water flows down to the sea in, perhaps, unusually rainy seasons.

Large tracts of country on the east coast of the gulf are covered with box (a species of eucalyptus), and with a small tea-tree with broad lanceolate leaves. The finest and most available land lies along the creeks and rivers; the soil is there much lighter, and the blood-wood, the leguminous iron-bark, and the pandanus, grow well on it, forming an open forest. All the rivers of Australia have lines of holes and hollows parallel to them, which are generally filled by high floods, and keep the water much longer than the rivers themselves. Lagoons of this description are numerous along the Staaten, the Van Diemen, the Gilbert, and the Caron, and appear to be constantly resorted to by the natives. To the north of the Staaten, towards the sea-coast, there is a succession of plains, but the grass is generally stiff and wiry. If we compare the course of the rivers on the east coast of the Gulf of Carpentaria, it will be considered remarkable that the Lynd, which rises in the latitude of the head of the gulf from the table land of the York Peninsula, should go to the N.N.W. and belong to a system of waters which joins the sea in 15° S. lat., instead of taking a direct course to the west, and disemboguing

in or near the head of the gulf. A number of coast rivers, of probably very short courses, the Nassau, the Staaten, the Van Diemen, Gilbert, and Caron, take their origin from the moderately elevated country which bounds the valley of the Lynd and Mitchell to the westward.

The fifth section comprises the Plains of Promise, so called by captain Stokes, which extend from the Flinders to the Nicholson, and are drained by the tributaries of three large salt-water rivers or creeks, the most westerly of which is the Albert of Stokes, and the Maet Suyker of the Dutch navigators. These plains Dr. Leichardt found covered with various tender grasses and herbs, interspersed with a few straggling trees. The narrow valleys of the creeks were filled with open scrub, formed by a small tree, whose fresh-cut wood has the odour of raspberry jam.

The sixth section of Dr. Leichardt's journey between the Nicholson and the Roper, is remarkable for the number of large, salt-water rivers, the density of its tea-tree scrubs, and the extent of its stringy-bark forests. Here, again, are hills and ranges, while pebbles of granite and porphyry indicate that the great arc of high land which sweeps round the head of the Gulf of Carpentaria approaches the sea-coast. The Van Alphen, the Abel Tasman, the Robinson, the Macarthur, and the Limnen Bight River, form broad channels of water, and occasionally afford magnificent prospects, especially cheering to eyes wearied by the monotony of the dense scrub.

The seventh section lies between the Roper and the high land of Arnhem's peninsula. The Roper is a large fresh-water river, fed by a great number of running creeks and brooks, all closely fringed by belts of pandanus. Almost the whole country along the river is open, well grassed, and available for depasturing purposes. At its upper course fine plains, bound by sandstone ridges, and diversified by pandanus creeks, form an extremely pleasing landscape. The high land is covered with an open, stringy-bark forest on a sandy soil; but its level is frequently interrupted by steep rocky sandstone hills and ridges, at the foot of which tea-tree swamps, with a peaty soil, form frequently the head of creeks. The fall of the high land of York peninsula is more sudden to the westward; the same is the case, in a still higher degree, in Arnhem's Land; for there is not only a very rapid fall in the

creeks, but there are precipices from 500 to 800 feet high, bordering the valley of the South Alligator River, over which numerous cascades rush down to join their waters with those of that river. It is remarkable, that the only slope which allowed the explorers to descend into the valley was formed of granite, whereas the whole of Arnhem's Land, and the ranges of the Roper, are composed of sandstone, which, near the divisions of the waters of the Gulf of Carpentaria and the north-west coast, has been broken through by basalt.

The eighth, and last section comprises the two Alligator rivers, and the Coburg peninsula. Its leading features are large swampy lagoons, extensive plains at the lower part of their course, densely-wooded ironstone ridges, and a great number of creeks in the Coburg peninsula, with limited flats of light alluvial soil, richly clothed with herbs and grasses during and immediately after the rainy season. These creeks generally enlarge into swamps, called "Mariars" by the natives, before they are lost in the mangrove thicket which covers their junction with the sea.

Concerning the capabilities of the country whose leading features have been above described, Dr. Leichardt thus expresses himself:—

"To the question of how far this country is available for colonization, I would reply—the greatest part is fit for pastoral purposes, excepting only the scrubs of the east coast of Australia, the mountain gorges of the Upper Lynd, and the tea-tree scrubs of the west coast of the Gulf of Carpentaria. But even here broad belts of fine country extend along both sides of the larger rivers, and will very probably be found quite as good as the country of the Roper. Horses and cattle will do well over the whole extent, particularly at Expedition Range, along the Isaacks, the Burdekin, the east coast of the gulf, and on the plains at its head. The rapid increase of the buffaloes on the Coburg peninsula, and the excellent condition of the herd of cattle which they keep at Port Essington, show that the north-west coast of Australia is no less favourable for the development of animal life. The elevation of Peak Range, and of the table land of the Burdekin, leads me to believe that these regions are fit for sheep. I am not sufficiently acquainted with the cultivation of tropical plants to give a decided opinion, but there is such a variety of soil, of aspect, and of elevation, that I feel convinced tropical plants will grow freely where sufficient moisture exists. The cotton, the indigo, the cocoa-nut, the banana, the arrow-root, the sweet potato, the bread-fruit tree, the jack-fruit, the soursop, the pineapple, the mango, and mangostine grow well in Port Essington; and captain Macarthur assured me that, according to the statement of the Malays, who had examined the swamps west of the settlement, they would do excellently for growing rice. The large plains of the Alligator rivers would suit equally well, and to an almost unlimited extent."

A third very important exploration was undertaken during the absence of captain Sturt and Dr. Leichardt. The surveyor-general, Sir T. L. Mitchell (whose former journeys have been briefly noticed), started from Sydney with a well-equipped expedition, in December 1845, one chief object being "the discovery of a good practical line of road to the nearest part of the Indian Ocean to the westward of Torres Straits, toward the Gulf of Carpentaria." The season was unpropitious by reason of great drought, and the intended route by the Bogan was found to be impracticable, from the scarcity of water in its channel. The intense heat killed all the Kangaroo dogs, most of the party were afflicted with ophthalmia, and the draught oxen were so much distressed that some of them dropped dead on the journey. A fortnight's halt was made at the ponds of Cannonba, between the Bogan and the Macquarie, during which time some refreshing rain fell, and from thence the expedition journeyed along the left bank of the Macquarie, and skirting the western limits of the marshes, proceeded to its junction with the Darling in 147° 33' E. long., 30° 6' 11" S. lat. While tracing the attenuated channel of the Macquarie among the reeds, where water, though scarce, was still to be found in ponds, Sir Thomas was startled by the report that "a flood was coming down from the Turon mountains, but that it travelled slowly and would not arrive until the following evening." At the time stated, a murmuring sound, like that of a distant waterfall, was heard, mingled with occasional cracks, as of breaking timber; very gradually the noise increased, until at length the flood burst into sight, glittering in the moonlight, and filling the dark and dry bed of the river with water brought a distance of 400 miles. Sir Thomas, after a graphic description of this singular spectacle, adds—"We thought then that there was an end of all our troubles, but in a few days after, in the same channel, we were just as badly off for water; that water had gone to fill thousands of lagoons, and never reached the channel of that river to which it was a mere tributary." Crossing the Darling, the party succeeded in reaching the swamp in which the Narran terminates; tracing that stream upwards (or northwards) to its junction with the Balonne, in 148° 25' E. long., they found it full of water and increasing in size and importance as it was ascended, with grass of the very best description on its banks. Pani-

cum lævinode (barley grass), the seeds of which, bruised between stones and baked into cakes, constitutes the chief food of the natives; and *Anthistirium Australis* (Kangaroo grass) grew on the plains in the open forests.

The banks of the Balonne minor seemed thickly peopled with friendly natives, who assisted the party in finding a way for the carts among the numerous lagoons, and guided them across the Culgōa. "From thence," says sir Thomas—

"I travelled to the upper Balonne, with the intention of proceeding northward along its right bank. That great river is there at its maximum, and is only inferior to the Murray in breadth and depth. Lower down it separates into various channels—the first branch being the Culgōa, falling into the Darling, about thirty miles above Fort Bourke—the remainder, or minor Balonne, again spreads its waters into the Narran, the Bokhara, the Ballandoola, and the Biree; the latter three, I believe, again unite, and fall into the Darling forty or fifty miles above Fort Bourke. Tracing the Balonne upwards, I found the country on its banks well covered with good grass, and we encountered only a small proportion of scrub. Some of the reaches were so broad, deep, and extensive, that I could not suppose this river contained only the waters of the Condamine, and I therefore expected to meet with some tributary from the north-west. On arriving at a natural bridge of rock, in $148^{\circ} 46' 45''$ E., $28^{\circ} 2' S.$, I selected a position commanding access to the other bank, and formed there a dépôt, with a small party, examined the country to the north-west. I first made a reconnoissance north-west by compass, and found in that direction, at the end of thirty miles, a poor, sandy, unpromising country."

Returning to the dépôt camp, Sir Thomas proceeded up the river, and followed the Cogoon, a small tributary from the north-west, through a beautiful country, until it led him among some hills, from whence he was enabled to form more extensive and accurate surveys. From Mount Abundance, a double-topped hill, in $148^{\circ} 40'$ E. long., $26^{\circ} 39' 30''$ S. lat., so named from the abundance of good pasturage around it, Sir Thomas looked on the finest country he had ever beheld in a primæval state. A champagne region, spotted with wood, stretching as far as the eye or even the telescope could reach, intersected by river lines from the north. A noble mountain mass arose in the midst, sufficiently elongated in a south-west and north-east direction to deserve the name of a range in about $142^{\circ} 2'$ E. long., $26^{\circ} 23' 32''$ S. lat. To the mountains were given the name of the Grafton Range, and to the surrounding country that of Fitzroy Downs. The sources of the Cogoon were found to arise between the three isolated mountains of Abundance, Bindyego, and Bindango, the

latter being connected by a low neck of grassy downs, with small knolls of trap-rock, to one of the masses of coast range in which the Balonne appeared to have its source. Northward from Bindango, other waters fall to the north-west, and in the remote distance one gap was perceived in a tabular sort of rocky country, through which it was hoped the water course would lead; but in following it down, this promising little river (the "Amby" of the natives) turned to the southward of west. The gap, however, formed a convenient pass, and was moreover a very remarkable opening, containing several conical hills, on which many strange shrubs were growing; one of the hills was composed of basalt.

The country through which the opening led consisted in general of sandstone; southward and back from the pass much good open forest land appeared around. In the country beyond, some smoke which arose in the woods excited the hopes of the surveyor-general, and following in the direction thus indicated, he came "upon a river fully as large as the Darling," called by the natives the "Maranoa." To the westward and northward of the sandstone ranges, lay a well-diversified country, with abundance of grass, some water, and finely-shaped hills, in groups, and also detached cones. But the river leaving that lower country, forced its way among rocky cliffs, where its course was traceable by the open ground along its banks, to be steadily south-west, receiving, of course, the river "Amby," which had turned also in the same direction. Sir Thomas traced the Maranoa upwards, and found that two tributaries joined it from the west, but they arose in subordinate sandstone ridges, and contained little water, while the main channel was dry and full of sand, water being less easily found there than in the sandstone gullies by which it was there enclosed. From Mount Owen (a cone in the range before mentioned,) the main channel of the Maranoa is visible coming through this range from mountains beyond it. Of these mountains the most lofty part, being remarkable for its extreme flatness, was named Buckland's Table Land. The account given by Sir Thomas in his despatches, of the discovery of valuable land made at this period of the expedition, is very interesting:—

"Continuing my ride to the north-west," he says, "I again found a chain of volcanic summits connected with a mass of table land which I named (finding

none of the Aborigines there,) Hope's Table Land. Between it and the still higher range towards the coast lay a very broken sandstone country, which was difficult to pass through with carts; but when I had at length discovered, beyond Hope's Table Land, the head of another promising river falling to the north-west, we soon found a way, through which my indefatigable party led the carts and bullock-team without the least damage. Mount P. P. King, a pointed volcanic cone, in long. $147^{\circ} 37' 40''$ E., lat. $25^{\circ} 9' 10''$ S., is near the head of that river, which we followed down until it turned, as all the others had done, to the south-west, and I was again obliged to halt, and take a long ride to the northward, where another chain of summits extended westward nearly under the 25th parallel of latitude. Beyond that range, whose summits are all of trap rock, I found deep sandstone gullies; and in following down one of these, I reached an extensive grassy valley, which terminated on a reedy lake in a more open country. The lake was supplied by springs arising in a swamp at the gorge of the valley which supported a flowing stream of the purest water. This stream spread into the extensive lake, and, to my surprise, was absorbed by it, at least so as to escape through some subterraneous outlet, for the channel of the river in which the lake terminated was dry. The country is adorned by hills of the most romantic form, presenting outlines which surpass in picturesque beauty the fairest creations of the painter. Several pyramids mark the spot where the springs were first discovered. Lower down appear, over the woods, isolated rocks, resembling ruined castles, temples, and Gothic cathedrals. Others have apertures through them, and the trees being also very varied and graceful in form, and rich in colour, contribute so much to the beauty of the scenery that I have been induced to distinguish the river and lake by the name of a painter. Returning to the party, we soon brought the carts and dray down the sandstone cliffs to the banks of the Salvator, and pursued that river downwards until I discovered, which was soon obvious, that its course turned to the eastward of north, consequently that we were upon a river falling to the eastern coast. We lost two days in vainly endeavouring to pass to the westward through dense brigalow scrub, but on a ride which I next took north-westward, I was more successful, for, after forcing my way through ten miles of scrub, I came to what seemed to me the finest region on earth: plains and downs of rich black mould, on which grew in profusion the *Panicum levinode* grass, and which was finely interspersed with lines of wood which grew in the hollows, and marked the courses of streams; columns of smoke showed that the country was too good to be left uninhabited; and, in fact, on approaching the nearest river channel, I found it full of water. This river I named the Claude, in honour of the painter of quiet pastoral scenery, and to the downs and plains, so favourable to flocks and herds, I gave the name of the Mantuan Downs and Plains. I returned to the party on the Salvator, crossed that river with it in lat. $24^{\circ} 31' 47''$ S., and conducted it, cutting our way through ten miles of scrub, to the banks of the Claude. These two rivers join at a considerable distance lower down, and form the Nogo—a river which, according to the natives, pursues a north-east course to the sea, and therefore, probably, has its estuary on the shores or in the vicinity of Broad Sound. We were obliged to make a bridge for the passage of our carts across the Claude, and then we crossed a plain, where grass grew almost as thickly as in Australia Felix; then

another stream, also full of water, was crossed, and we ascended undulating downs on which fragments of fossil wood were abundant, in a very rich soil. Beyond these (the Mantuan Downs) a range of broken summits appeared, which we found to be the upper part of a very difficult sandstone country, wherein the beds of the gullies were at a much lower level than the downs and plains."

Westward of these the country was quite impervious, the party therefore descended by an open gently declining valley to the head of a creek, falling north-west, but Balmy Creek (so called from the fragrant shrubs growing there) soon led them to the heart of the sandstone gullies, and they were glad to find a favourable outlet to the open country by a pass, in the gorge of which stood a rock so much resembling a tower, that it was difficult to believe it the work of nature. The glen thus entered (Glen Turret) was very extensive, contained abundance of good grass, and was bounded on the east and west by very broken-topped ranges; to the northward the view was over a more distant country. Ascending the most northerly summit of the range on the west, which he named Mount Mudge, the surveyor-general perceived that the course of the river Belyando, which they had followed for a considerable distance in the hope of its leading to the Gulf of Carpentaria, turned at length from the north-west, to the north and north-east, and was, in fact, the river noted by Dr. Leichardt as joining the Suttor in $21^{\circ} 6'$ S. lat.; the party were, therefore, compelled to retrace their steps to their first camp on the Belyando, in $147^{\circ} 17'$ E. long, 24° S. lat. From three remarkable points of the range just behind, Sir Thomas resolved on renewing his search for a river running in the desired direction. These three volcanic cones, called Mounts Pluto, Hutton, and Playfair, form an obtuse angled triangle. Crossing a range of clay ironstone, covered with dense scrub, which extends northwards from Mount Playfair, he discovered the sources of the Warrego, a river flowing south-west, and on the western side followed down the head of another river, falling north-west, which he called the Nive, but which subsequently took a southerly and at length even an easterly direction. Returning disappointed, but not disheartened, Sir Thomas hastened to a gap he had noticed in a westernly ridge, connected with that to the northward, and ascending a naked rock to the west side of it, beheld in the midst of open plains a line of trees marking the line of a river in a north-west direction, as far as the eye could reach. For ten successive days

the delighted explorer pursued, on horseback, the course of the river, which he named the Victoria, in honour of our gracious sovereign, and found it, in some places, forming broad and important reaches, in others spreading into four or five branches, some of them several miles apart; the whole country being better watered than "any other portion of Australia" he had previously beheld, by numerous tributaries arising in the downs.

"The soil," says Sir Thomas, "consists of rich clay, and the hollows give birth to water-courses, in most of which water was abundant. I found, at length, that I might travel in any direction and find water at hand, without having to seek the river, except when I wished to ascertain its general course and observe its character. The grass consists of panicum and several new sorts, one of which springs green from the old stem. The plains were verdant; indeed the luxuriant pasturage surpassed in quality, as it did in extent, anything of the kind I had ever seen. The myall tree and salt bush (*Acacia pendula*, and *salsala*) are also there. New birds and new plants marked this out as an essentially different region from any I had previously explored. That the river is the most important of Australia, increasing as it does by successive tributaries, and not a mere product of distant ranges, admits of no dispute; and the downs and plains of Central Australia, through which it flows, seem sufficient to supply the whole world with animal food. The natives are few and inoffensive."

He adds—

"I crossed the river at the lowest point I reached, in a great southern bend, in $144^{\circ} 34'$ E. long., $24^{\circ} 14'$ S. lat., and from rising ground beyond the left bank, I could trace its downward course far to the northward. I saw no callitris (pine of the colonists) in all that country, but a range, showing sandstone cliffs, appeared to the southward, in about 145° E. long., $24^{\circ} 30'$ S. lat. The country to the northward of the river is, upon the whole, the best; yet, in riding ninety miles due east from where I crossed the southern bend, I found plenty of water and excellent grass; a red gravel there approaches the river, throwing it off to the northward. Ranges extending N.N.W. were occasionally visible from the country to the northward."

The diminution of supplies compelled the surveyor-general to return to the camp on the Maranoa river, where the remainder of his party had been stationed for eighteen weeks, and from thence the expedition returned to Sydney, consuming the last of their provisions on the day of their arrival. The fertile and available country thus discovered is roughly estimated by Sir Thomas Mitchell at 160,000 square miles, the soil on the banks of the Victoria being a rich black mould, producing spontaneously all the best grasses known in New South Wales, and five new kinds of excellent quality. The climate was salubrious, for it is one of the strange contrarieties partly accounted for by

the gradual rising of the land, that in proceeding towards the tropics the air becomes cooler. The coast range breaks off in the parallel of 25° at the lofty plateau of Buckland's Table Land, and Sir Thomas Mitchell considers easy access with this fine country might be found from the good harbour of Port Bowen, which has been skilfully surveyed by Captain Blackwood, R.N. The distance between Port Bowen and the head of the Salvator is 220 miles.

On the return of the expedition to Sydney, the local government despatched assistant-surveyor Kennedy to follow up the discoveries of the surveyor-general, and follow the supposed course of the Victoria River to the Gulf of Carpentaria. After an arduous journey, Mr. Kennedy traced the Victoria flowing to the westward and then to the southward, for more than one hundred miles, until a total failure of water and vegetation compelled him to abandon further research in $26^{\circ} 15' 9''$ S. lat., $142^{\circ} 20'$ E. long. His observations led him to believe the Victoria identical with "Cooper's Creek," traced by captain Sturt to $27^{\circ} 56'$ S. lat., 142° E. long., and then coming from the north-east. In $25^{\circ} 9' 30''$ S. lat., and about $143^{\circ} 16'$ E. long., Mr. Kennedy found a considerable river joining the Victoria from the north-east, which he named Thompson's River. It is possible that Mr. Kennedy may have erred in taking a wrong branch or tributary of the Victoria for the main stream, and thus been led too far away to the westward and southward, until he reached the margin of Sturt's desert. Returning to the colony, he passed through a fine country between the parallels of $25^{\circ} 55'$ and $28^{\circ} 15'$, and the meridians of $145^{\circ} 28'$ and $146^{\circ} 44'$, watered by the Warrego River, which he describes as containing "deep reaches of water, occurring at short distances, and increasing in proximity as he advanced. This inexhaustible supply of water is bounded by open forests for the first forty miles, and from thence by extensive plains thickly covered with the most luxuriant pasture, and broken here and there by clumps of acacia pendula. I have never seen in the colony any country which surpasses it, and but very little to equal it, either as being adapted for the depasturing of cattle, or any kind of stock." He followed the Warrego to about $28^{\circ} 25'$ S. lat., $140^{\circ} 28'$ E. long. It there divided into two equal channels, which shortly reunite, but only to form the insignificant dry bed of a water-course; the country on either side

being flat, and subject to inundation, void of grass, but thickly covered by a species of small grass and acacia. Mr. Kennedy here left the Warrego, being unable to procure water in either channel of the river, even by sinking wells, "once more disgusted and disappointed," he emphatically states, "as all travellers will ever be who put their trust in the interior rivers of Australia."

Mr. Kennedy was subsequently despatched by the local government on another exploratory journey—but has never returned to the colony, and is supposed to have perished in an encounter with the natives.

Another exploration was undertaken, of which an account will be given in the Supplement. On the return of Dr. Leichardt from Port Essington, the colonists of New South Wales raised by subscription about two thousand pounds in token of their grateful sense of his important discoveries; partly with this fund, and partly by the aid of other contributions, the enterprising traveller fitted out another expedition, and, accompanied by eight persons, started from Moreton Bay in March, 1848, intending to attempt to reach Swan River by crossing the continent from east to west. The journey he supposed would occupy two years, and probably necessitate the traversing of more than 5,000 miles. Should Dr. Leichardt succeed in his meritorious attempt, the mysterious interior of Australia will at length be penetrated, and the question solved on which two leading authorities so widely differ—Mr. Eyre having steadfastly adhered to the belief that no inland sea exists; and captain Sturt still giving it as his opinion that more than one will eventually be discovered. [See Supplement.]

The foregoing brief account of a few of the most remarkable explorations in Australia, will, it is hoped, convey to the mind of the general reader, some idea of the vast and varied regions so newly trodden by the foot of civilised man. In each Australian colony, a spirit of enterprise and honourable emulation has been manifested and sustained by the colonists, which is abundantly attested by the large amount of territory, not only examined, but absolutely occupied, in the teeth of difficulties which appeared well-nigh insurmountable. I do not attempt to enumerate the long list of Australian explorers whose strenuous exertions have been productive of permanent benefit to their countrymen, and reflected honour on the land of their birth, for in doing so I might possibly omit many

well deserving most honourable mention, but I cannot close this section without paying a tribute of esteem to the gallant officers of the army and navy, who turning, as it were, "their swords into pruning hooks," have yet encountered dangers quite equalling those of the battle-field, and won unfading laurels. The melancholy fate of three individuals is too intimately connected with this subject to be passed over in silence; namely, that of captain Barker, who was speared by the natives while engaged in the cause of geographical research on the south coast; of Mr. Darke, who fell by the hands of the aborigines, in 1844; and lastly of a promising youth, the son of Sir Thomas Mitchell, who perished for want of medical aid, while surveying in winter the Australian Alps.

TIDES.—The tidal wave strikes the whole coast of Australia, from Sydney to Torres Strait, nearly at the same time, viz., at eight o'clock at the full and change of moon. At Cape Palmerston, the rise is from twenty-four to thirty feet, while at Port Bowen to the south, and at Port Molle to the north, the rise is only sixteen feet. At Port Bowen the flood tide comes from the south, while at Broad Sound and to the north, it comes from the north. On the north-west coast of Australia, about Cambridge Gulf and Buccaneer's Archipelago, there is also a limited space where the rise and fall of tide is greater than on the adjacent coasts. At Rockingham Bay, Endeavour River, and about Palm Island, there is no tide at all. At Hanover Bay, on the west coast, the highest tides occur on the fourth day of the full or change of the moon, when they attain a maximum height of twenty-five feet, while during the neaps, the difference between high and low water does not sometimes exceed twenty-four inches. Captain Stokes says that the tides in the head of the Gulf of Carpentaria appear to be a compound of many others, obliterating the common daily difference, and producing only one tide in twenty-four hours. The direction of the flood stream commences at S.S.E., changing gradually to S.S.W. as it terminates; that of the ebb changes from N.W. to N.N.E. The strength of each is from a quarter to one knot; rise at springs, nine to twelve feet; at neaps, three to eight feet. At the entrance of Van Diemen's Inlet, in the Gulf of Carpentaria, it is high water at the full and change of the moon at a quarter to seven, but in the upper part the tides are three hours and a quarter later. The length of both flood and ebb is twelve hours, and

the direction of the flood being from the northward, following the eastern shore of the gulf. There are currents from Breaksea Spit to Torres Straits; from thence it sets to the north-west, but after passing the strait it is affected by the monsoons.

WINDS.—In the tropics the real motion of the earth in an opposite direction to the apparent motion of the vertical sun westward, produces a westerly motion both in the tides of the sea and in the atmosphere; hence the origin of the "trade winds," which extend beyond the tropics into both hemispheres, and shift northerly and southerly with the declination of the sun. These winds tend more to the southward as the latitude increases, and extend farthest into each hemisphere during its summer. A great portion of the southern hemisphere being sea, the extra-tropical wind is much more regular than in the northern, but in both the prevailing wind blows in an opposite direction to the trade; hence on the south and west coasts of New Holland, the south-west wind is the most constant, and it produces an easterly current in the ocean which is felt along the south shore.*

The arid and heated surface which appears to form the interior of Australia, attracts the wind from the north coast, and it blows to the south and east in hot and violent gusts, the thermometer reaching frequently 120° Fahr. I have myself marked the thermometer at 110° Fahr. on Christmas eve in New South Wales. In the winter season, when the land begins to cool, west winds prevail on the south coast. There is no periodical recurrence of dry and rainy seasons between Cape Howe and the tropic of Capricorn, where the variations incident to the torrid zone commence. The south-east trade wind is tolerably regular for three-fourths of the year, and the sea and land breezes steady. From Torres Strait to Cape Van Diemen, the monsoons are felt in the open channel; the south-east wind blows from March or April to November; weather generally fine during the remainder of the year, when the sun is nearly vertical. The north-west monsoon is accompanied by heat, thunder, lightning, and heavy rains. The great size and peculiar configuration of the Gulf of Carpentaria has considerable influence; the south-east monsoon, which is a sea wind, brings the rainy season; the north-west, which is a land wind, brings dry weather.

The north-west coast lying between the

* *Picture of Australia.*

tropics and the east trade wind, and trending to the southward, has not so much of a tropical character, and the east monsoon which begins in April, and blows in gusts, seldom lasts longer than the end of June. The monsoon in summer (December and January), blows from the west, varying a point or two to the north or to the south. In February the west wind dies away; the weather becomes variable, with squalls and heavy rain. Currents follow the wind on the west coast; the general winds are from between the north-west and south, but generally toward the west, and near Cape Leeuwin chiefly from the south-west—in summer, often from the north-west during the night. The ocean current divides into two parts at Cape Leeuwin; one sets east along the south coast, the other north along the west coast.

On the south coast the wind is from the west during the greater part of the year, and easterly only during the latter end of summer in January, February, and March; it is then felt most at projections of the coast, viz., near Wilson's Promontory and King George's Sound.

The land wind on the north-west coast has the same dry and parching character as in New South Wales; when Captain King rounded the North-west Cape in February, and got under the lee of the land, the air which had previously been of a pleasant temperature, became so hot as to produce a scorching sensation. Towards the middle of the north-west coast, he found the temperature at noon in the shade 120° Fahr., and on land ten degrees higher. The north-west and north coasts partake of the unhealthiness of a tropical region, the atmosphere being infected by vegetable miasma. The inter-tropical parts of the east coast, possessing high and diversified land, not so subject to be flooded, and with regular monsoons, appears more salubrious. The general direction of the winds on the west and south-west, south and south-east coasts being from the sea, the temperature in summer is delightful. On the Blue Mountains in New South Wales, and on the Australian Alps in Port Phillip, snow falls in winter, and it freezes there for several months, generally in June, July, and August. Hail falls in large, irregular masses during the summer.

CLIMATE.—Excepting on the marshy shores of the north-west coasts of Australia, the climate of the whole territory is remarkably salubrious; this is proved by the good health

of the Europeans engaged in exploring expeditions even within the tropics, where they have been most laboriously employed for months, exposed to a burning sun by day, without any shelter by night but that of a tree or ledge of rock, and with very imperfect and scanty nutriment. Yet among many hundreds thus occupied, there is in the long list of sufferings from various causes no record of any one dying from fever or other pallidial influences. When Dr. Leichardt proceeded on his perilous journey to the north-west, he found the land become more elevated and the climate cooler. He remarks, "The bracing nature of the south breeze at night had a very beneficial influence on our constitutions, and the regular interchange of land and sea breeze contributes everywhere to render a climate healthy." Captains Grey and Lushington on the north-west coast, after twelve weeks' toilsome exploration, did not suffer from climate disease. Neither did captain Stokes and his gallant companions experience illness during their surveys of the Victoria, Albert, Adelaide, and other rivers in tropical Australia, although absent for weeks among mangrove shores, which I know from dear-bought experience to have been so destructive to the health of those engaged in our boat river surveys in Africa, where not unfrequently the entire crew of a well-titled pinnace have perished from exposure to river exhalations during a single night.

GEOLOGY.—Facts on this interesting and important section are necessarily scanty, and insufficient to afford the materials for a general description. Mr. Jukes says, that the mountain chain on the east coast has an axis of granite, with occasional large masses of greenstone, basalt, and other igneous rocks. It is flanked on both sides by thick beds of palæozoic formations, chiefly sandstone, but also containing limestone and coal. In the north portions of the chain, Dr. Leichardt found the same formations, and especially trap and granite, near the Burdekin River. At Port Phillip there are similar igneous rocks, and on the coast tertiary formations resting on the edges of upturned palæozoic beds. In Western Australia, the Darling range consists of granite below, covered by metamorphic rocks, and between it and the sea is a plain, composed of tertiary beds. In Northern Australia, there is a great sandstone plateau, rising to 1,800 feet above the sea, and probably of palæozoic age; whilst on the immediate shore, and

round the Gulf of Carpentaria, are beds supposed to belong to the tertiary period. Captain Sturt found similar substrata in the central desert. It is probable these tertiary rocks are continuous throughout the centre of the island; and during the tertiary period, all this portion of the country was submerged, whilst the high lands on the coast rose like groups of islands from the shallow sea. Captain Sturt supposes Australia to have been formerly an archipelago of islands; and Mr. Gould is of opinion, that at some remote period it must have been divided into at least two portions, since, with few exceptions, he found the species of birds inhabiting the same latitudes of its east and west divisions, differing from, but representing each other.

This immense island appears of *diluvian* rather than volcanic origin, but different causes may have operated conjointly in its formation; after having been left partially dry by the receding of the mighty deep from the north to the south pole, some powerful submarine action, (as in the case of Chili, and other parts of America,) may have raised the crust of our globe, in this spot, above the ocean level, either at one shock, or by a series of successive shocks. But one comparatively recent active volcano is known, viz.—Mount Wingen (see New South Wales Book); but vast quantities of marine shells have been found, at various degrees of elevation above the sea, in some places imbedded in sandstone. On the east coast of Australia, this sandstone strata lies in beds, one on the top of another, in the most regular manner, their original relative situation evidently having never undergone any change. Mr. Berry, who devoted considerable attention to the subject, while admitting that the beds are not invariably strictly horizontal, contends that this may arise from a gentle yielding of the substrata. Some of these beds, though perfectly horizontal and of regular thickness, consist of thin laminae, which incline at a considerable angle to the north-east. This sandstone is principally siliceous; sometimes, indeed, it is argillaceous, and in this state it is generally found over coal, in which situation it is soft and very decomposable. Among the coal measures, thin beds of what may be called calcareous sandstone are occasionally met with. In fact, according to Mr. Berry, the mountain ranges on the east coast of Australia, from Bass' Straits to 19° S. lat., consist, with few exceptions, of vast conglomerations

of sandstone; and he asserts, that there is no granite to be found in masses near the coast for an extent of 1,200 geographical miles. At the 19th parallel, a chain of lofty granitic or primitive mountains appears, of various elevation, forming the barrier towards the ocean for about 300 geographical miles, *i. e.* to the parallel of 14° S. lat. Here the sandstone again predominates, the land gradually dipping till it loses itself in the sea to the north, whence coral reefs extend as far as the eye can reach. Dr. Fitton, in his analysis of captain King's valuable survey, says, that between the parallels of 28° and 12° or 13°, on the east coast, granite is found; at Capes Cleveland and Grafton, Endeavour River, Lizard Island, and at Clark's Island, on the north-west of the rocky mass which forms Cape Melville; while rocks of the trap formation have been noticed, in three detached points, among the islands off the shore; in the Percy Isles, about 21° 40' S. lat., Sunday Island, north of Cape Grenville about 12°, and in Good's Island, on the north-west of Cape York, in 10° 34' S. lat.

Along the north and west shores, the prevailing stratum is a reddish sandstone, agreeing so much in character with that of the west of England and Wales, that specimens from the two countries can scarcely be distinguished from each other. An arenaceous cement in the calcareous breccia of the west coast, is precisely the same with that found in Sicily; and the jasper, calcedony, and green quartz approaching to heliotrope, found at the entrance of Prince Regent's River, resemble those of the Tyrol, both in their characters and formation. No limestone occurs among the specimens from the north and western shores; but it is remarkable, that recent calcareous breccia was found by commodore Baudin to exist throughout a span of no less than twenty-five degrees of latitude, and an equal extent of longitude, on the south-western and north-western coasts, and, according to Mr. Browne's specimens, on the shores of the Gulf of Carpentaria also.

This breccia would appear to be a very recent limestone full of marine shells, similar to that which exists on the shores of the Mediterranean and the West Indies. It would be an interesting geological fact, were it ascertained that a distinct line can really be drawn between those concretions of modern formation, which occur on the sea shore, and other calcareous formations very

nearly resembling them, both in the fossils they contain, and in the character of the cementing substances, that are found in several countries, at considerable heights above the sea. An illustration of this remark, indicating likewise the strata of the transalpine country of New South Wales, occurs at the limestone caves at Wellington Valley, 170 miles west of Newcastle, and 2,000 feet above the sea. Sir Thomas Mitchell, the surveyor-general of New South Wales, who discovered the cave in Wellington Valley, sent the following interesting account of it to the Geological Society, which that learned body has, with its usual liberality, permitted me to embody in these pages:—

“The rock, through which the valley has been excavated, is limestone, much resembling in external characters that of the carboniferous series of Europe. This appears on both sides of the valley, above the alluvial deposits in the bottom, and extends on the east to the height of about 100 feet above the stream. On the west of the valley, hills of greater height run parallel to the limestone, consisting of a red sandstone and conglomerate; and a range of heights on the east of it is composed of trap rocks. The basis of a tract, still further eastward, which divides the waters of the interior from that which sends its streams to the sea, is granite. The rugged surface of the limestone tract, in several parts of which the bare rocks are exposed, appears to abound in cavities, the orifices of caves and fissures; two of which, the more immediate subject of this communication, are about eighty feet above the stream of the Bell, on its eastern side; the first being a cave about 300 feet in extent; the second apparently a wide fissure in the limestone, partially filled up. The cave agrees in structure with many of those well known from the descriptions of Dr. Buckland and other writers: it descends, at first, with a moderate inclination; and about 125 feet from the mouth, the floor is thickly covered with a fine dry reddish dust, in which a few fragments of bones, apparently of kangaroos, occur. The cavern, in different places, affords beautiful stalactites and stalagmitic incrustations. Irregular cavities in the roof seem to lead towards the surface of the hill; and at the remotest part, the floor is covered with a heap of dry white dust, so loose and light, that one of the exploring party sunk into it up to the waist. This dust, when chemically examined by Dr. Turner, was found to consist principally of carbonate of lime, with some phosphate of lime and animal matter. In fine, the cave appeared to terminate in a fissure nearly vertical, with water at its bottom, about thirty feet below the lowest part of the cavern, and nearly on a level with the waters of the river Bell. This fissure also extends upwards towards the surface.

“About eighty feet to the west of the cave above described, is the mouth of another cavity of a different description, first examined by Mr. Rankin. At this place, the surface itself consists of a breccia, full of fragments of bones; and a similar compound, confusedly mixed with large rude blocks of limestone, forms the sides of the cavity, which is a nearly vertical, wide, and irregular sort of well, accessible only by the aid of ladders and ropes. This breccia con-

sists of an earthy red calcareous stone, having small fragments of the grey limestone of the valley dispersed through it, and in some parts, possesses considerable hardness. Near the lower part of the fissure (the whole extent of which was not explored,) were three layers of stalagmitic concretion, about two inches in thickness and three inches apart, the spaces being occupied with a red ochreous matter, with bones in abundance, imbedded both in stalagmite, and between the layers of it.

"The bones found in the fissure just described, of which specimens have been sent to England, belong, with only two exceptions, to animals at present known to exist in the adjacent country; and their dimensions also are very nearly the same with those of the existing quadrupeds. The species, from the report of Mr. Cliff, to whose examination the bones were submitted, appear to be as follow:—kangaroo, wombat, dasyurus, koala, phalangista—the most abundant being those of the kangaroo. Along with the remains just mentioned were found two bones, not agreeing with those of any of the animals at present known to exist in New South Wales. The first and larger is supposed to belong to the elephant: the second bone is also obscure and imperfect, but seems to be a part of one of the superior maxillary bones of an animal resembling the Dugong; it contains a portion of a straight tusk, pointing directly forward."

A pit was dug, by sir T. Mitchell's direction, in the surface of the ground, about twenty-five feet from the mouth of the fissure, at a place where no rocks projected; and the hill was there found to be composed of a hard and compact breccia, such as that before described, and likewise abounding in organic remains. Other caverns, containing a similar breccia, occur in the limestone on the north bank of the Macquarie, eight miles north-east of those at Wellington; and about fifty miles to the south-east at Buree, are several caves like the first described above, which communicate with fissures partially occupied with breccia containing bones. At Molong, thirty-six miles to the east of Wellington, a small quantity of concreted matter has been found, containing numerous bones, of which no specimens have been sent to Europe; but, from their size, they would appear to have belonged to species of animals or birds larger than those which are at present known in the country.

The specimens of rocks collected by captain King and Mr. Browne at different parts of the Australian coast line have been locally classified as follows:—

Granite.—Cape Cleveland; Cape Grafton; Endeavour River; Lizard Island; Round Hill, near Cape Grindall; Mount Caledon; Island, near Cape Arnhem; Melville Bay; Bald-Head, King George's Sound.

Various Slaty Rocks.—*Mica Slate*, Marrison's Island. *Talc Slate*, Endeavour River. *Slaty Clay* Inglis's Island, Crack Island,

Percy Island. *Hornblende Rock*, Pobassoo's Island, Half-way Bay, Prince Regent's River. *Granular Quartz*, Endeavour River, Montagu Sound, north-west coast. *Epidote*, Cape Clinton, Port Warrender, Careening Bay. *Quartzose Conglomerates and Ancient Sandstones*, Rod's Bay, Islands of the north and north-west coasts, Cambridge Gulf, York Sound, Prince Regent's River. *Pipe Clay*, Melville Bay, Goulbourn Island, Lethbridge Bay.

Rocks of the Trap Formation.—*Serpentine*, Port Macquarie, Percy Isles. *Sienite*, Rod's Bay. *Porphyry*, Cape Cleveland. *Porphyritic Conglomerate*, Cape Clinton, Percy Isles, Good's Island. *Compact Felspar*, Percy Isle, Repulse Bay, Sunday Island. *Greenstone*, Vansittart Bay, Bat Island, Careening Bay, Malu's Isle. *Clinkstone*, Morgan's Island, Pobassoo's Island. *Amygdaloid, with Chalcedony*, Port Warrender, Half-way Bay, Bat Island, Malu's Island. *Wacke*, Bat Island. *Recent Calcareous Breccia*, Sweet's Island, north coast; Dirk Hartog's and Rottnest Island, &c., west coast; King George's Sound, south coast. *Limestone, resembling, in the character of its organic remains, Mountain Limestone of England*, Interior of Australia, near the east coast.

The Coal Formation, as yet discovered, applicable for domestic or steam purposes, is confined chiefly to the east coast of Australia.

Not the least remarkable circumstance connected with Australia is the contrast its geological features present, when compared with the apparently volcanic islands in the adjacent Coral and Arafura seas. The line of islands between Cape York and Mount Cornwallis are all granite, or old metamorphic rocks, and those lying between that line and the volcanic islands of Erroo and Murray group, are all flat coral islands.

On the north-west coast of Australia the predominant geological feature is red sandstone, while at the island of Timor the little rocky headlands on the coast expose beds of coral and limestone, full of corals and shells apparently of recent formation. This limestone appears to constitute the whole surface of the island, spreading over all the adjacent high lands, at an elevation of 2,000 feet, giving them rather a smooth and level outline.

The rocky islands in the central north and south bend of Torres Strait are, in some instances, inhabited, but only those within thirty or more miles from the coast have cocoa-nut trees on them.

Diversity of surface and aspect produces, in Australia, diversity in appearance. Forest timber, brushwood, and grasses are not divided into zones, as in other countries, according to their elevation; the nature of the soil and the proximity of water seems to determine the class of productions, irrespective of latitude or altitude. In many places, the whole face of the country has the appearance of a landscape garden—a grove here, a lawn there—beyond a shrubbery, or clump of trees, and frequently a natural wall of a light-coloured stone, scarcely to be detected from good masonry, and appearing through the foliage like the enclosure of a parterre. The interior explorers found these apparent "pleasure grounds" of various sizes, suited to the humble cottage or the princely mansion. Even in my own limited experience of these strange regions, I have felt it difficult to realize the fact, that so far from having been adorned by the hand of civilized man, they were untrodden, save by the foot of the wandering savage.

The geology and natural vegetation of Australia, like those of other countries, appear to be intimately connected. In the districts with which we are best acquainted, the rock which forms the basis of the country, may be known from the kind of tree or herbage that flourishes on the soil above. For instance, the *eucalyptus pulv.*, a dwarfish tree, with glaucous-coloured leaves, growing mostly in scrub, indicates the sandstone formation; while those open, grassy, and park-like tracts, affording good pasturage, and thinly interspersed with the *eucalyptus mannifera*, characterize the secondary ranges of granite and porphyry: the limestone formation has on its superincumbent soil trees of lofty growth and vast size, while large umbrageous shrubs, the *cupressus callitris* and *casuarina*, occupy sandy ridges. From many facts adduced by the observant captain Sturt, it may be inferred that the trees are gregarious, and that the strong line that occasionally separates different species, and the sudden manner in which several species are lost at one point, to reappear at another more distant, may be ascribed to the geological strata of the country. It is, however, impossible to determine accurately the extent to which the peculiar geological structure of Australia influences the character of its productions: but it is a singular fact, that the vegetation of the north, or tropical coasts, differs totally from that of the adjacent islands. Cocoa-nut trees are nowhere to be

found in Australia, while at Murray's island, within the great Barrier reef, which is about 700 feet high at its most elevated part, with steep broken ground, the whole of its lower portion, and even a considerable part of the hills, are covered with groves of cocoa-nut trees. Mr. Jukes remarks, that at the island of Timor, where the difference of latitude is not more than forty miles from Port Essington, in North Australia, and the actual distance not 250 miles, the difference in the appearance of the vegetation is as great as one would expect between two countries lying under different zones. The gum trees (*eucalypti*) which line the shores of Australia, to 11° N. lat., are not found in New Guinea, or in the islands of the Eastern Archipelago.

Taking Endeavour Strait, Cape York, and Mount Adolphus as a base, all the islands which stretch across the Strait to the northward of them, have one common character. They are all steep and rocky, many of them 400 to 500 feet high. The rocks of the main land of the adjacent islands are all porphyritic; and Mr. Jukes considers these islands as, in fact, merely the submarine prolongation of the great mountain chain of the eastern coast of Australia, and remarks, that in Torres Strait the line of demarcation is almost equally strong and precise between two groups of vegetation and two groups of the lower order of animals, as between two varieties of the human race. A sombre vegetation spreads all over Cape York and the immediately adjacent islands, of which wide forests of large but ragged-stemmed gum-trees, with almost leafless branches, are the chief characteristic.

Here and there, says Mr. Jukes, speaking of the north coast, are gullies with more umbrageous foliage, and some palms, but the mass of the woods are arid, hot, and dusty, the leaves not only small but dry and brittle, and the marks of frequent fires everywhere apparent in calcined rocks, blackened stems and fallen trunks. The contrast with this northern coast of Australia and the islands on the northern side of Torres Straits, is certainly very great; there, not a gum tree is to be seen; the woods are close, lofty, and afford deep and refreshing shade, often matted into impenetrable thickets by creepers and undergrowth, but adorned with varied foliage, with the cocoa-nut, the plantain, and other trees and shrubs useful to man. On the New Guinea coast, the vegetation is extraordinarily luxuriant, even for the tropics. There is also a difference in

the shells and echinodermata, collected about Cape York and those obtained near Erroob or Darnley Island on the coast opposite to North Australia. In the mineral, the vegetable, and the animal kingdoms, and even in the human race (as will be shown in a subsequent chapter), the territories on each side of the narrow strait of Torres, present totally different aspects, which can scarcely be assigned to distinct geological formations; but it must be admitted that the sandstone strata which constitutes such a large portion of northern and north-western Australia, must have considerable influence in giving the peculiar dryness perceptible in Australia, where, as has been truly observed, every thing absorbs heat freely, and radiates it into the surrounding atmosphere; the sea air, instead of being cooled and precipitated in refreshing moisture, has its temperature raised, and becomes an absorbent of any moisture on the surface, for the open and scattered woodlands, with their small, thinly disseminated leaves, instead of protecting the soil from the parching effects of a vertical sun, become conductors of heat, and are ever ready to catch fire from the slightest spark. Captain Sturt experienced, in November, 1845, a severe gale of *hot* wind, in the parallel of 27° , and about the meridian of 140° . The withering effects of this gale, which was from the *north-east*, were terrific. Everything, animate and inanimate, gave way before it; the birds were mute, the leaves fell from the trees like a snow shower; the horses stood with their backs to the wind, and their noses to the ground, without the muscular strength to raise their heads. A thermometer graduated to 127° , after rising to 125° burst the bulb, by the expansion of the mercury. The air during the summer, in this region, had a temperature from 110° to 123° Fah.; the wind blowing heavily from N.E. to E.S.E., filled the air with impalpable red dust; the ground was so heated, that matches falling on it ignited, and rockets, on being lit, exploded at once without rising from the ground. The atmosphere, on some occasions, was so rarified, that captain Sturt and his party "felt a difficulty in breathing, and a buzzing sensation on the crown of the head, as if a hot iron had been there." On two occasions the thermometer was noticed to exceed the range of 130° Fah. *in the shade*, "the solar intensity, at the same time, being

nearly 160° ." At the *dépôt* of captain Sturt, in lat. $29^{\circ} 40'$, from December, 1844, to the end of April, 1845, the prevailing winds were from E.N.E. to E.S.E.; after that month they were variable, but west winds predominated. The south wind was always cold, and invariably indicated by a rise of the barometer, which did not ascend above 30.260 , or fall below 29.540 : rain usually commenced in the north-east quarter, and gradually went round to the north-west. The sky, generally speaking, was without a speck, and the dazzling brightness of the moon was most distressing; it was impossible to shut out its light; and its irritating effects were very remarkable. At the *dépôt*, the fleece of the sheep taken by the explorers into the interior ceased to grow, as did also the hair and nails of captain Sturt and his party. These facts, and the scanty vegetation, indicate the excessive dryness of this portion of central Australia, arising not only from the solar rays, but also by the terrestrial emission of heat from proximate volcanic fires. It is probable, also, that very little rain reaches the centre of Australia; on the north coast the rainy monsoons are greatly mitigated by the mountainous islands of the Eastern archipelago; on the north-east coast the lofty coast ridge of four to five thousand feet elevation intercepts the showers from the Southern Ocean; the Australian Alps, in the south-east, are the means of diffusing a large quantity of moisture over the adjacent region, but the comparatively lower elevation of the coast range of Western Australia permits a greater diffusion of rain and dew towards the interior. The presumed absence of any large mountains in the centre of Australia, the great distance of that centre from the ocean, the sandy formation of the country, and the saline qualities of the soil, all contribute to the belief that the interior of this insulated continent will not eventually be found available for the support of civilised man. But making large allowances for the barren central region, and for the sandstone wastes in other places, there probably is not less than two million square miles capable of yielding in abundance the productions of the temperate and of the torrid zones, and where horned cattle and sheep may be multiplied to an extent that would furnish all the inhabitants of Europe with animal food. [Further details, and the gold discoveries, given in the Supplement.]

BOOK II.—NEW SOUTH WALES.

CHAPTER I.

ORIGIN OF TRANSPORTATION—EARLY SETTLEMENT AND HISTORY—CONVICT DISCIPLINE, AND RELIGIOUS REFORMATION—GRANT AND SALE OF CROWN LANDS—EFFECTS OF HIGH PRICES OF LAND—LIST OF GOVERNORS.

THE original settlement and early history of New South Wales, occupies one of the most interesting pages in the annals of British colonization. The formation of a convict settlement at the Antipodes, must have been a startling proposition, and the motives which actuated the government of the day in taking so bold a step, in a matter in which their conduct was naturally watched by the public with jealous scrutiny, can scarcely be rightly understood without some knowledge of the system of transportation previously pursued.

The causes which first necessitated the adoption of this punishment in England, in its primary form of simple banishment, may perhaps be traced to the immense increase of pauperism which followed the confiscation of church property and the extinction of monastic institutions in the reign of Henry VIII., and the absence of any efficient measures for the relief of the poor, or for the suppression of crime, which augmented so fearfully as to threaten the destruction of the very frame-work of society. An act of parliament in this reign, asserts that there were then no less than 60,000 prisoners (or about one out of every fifteen of all the males arrived at manhood) confined in the different gaols of England, and Hume appears disposed to believe that 72,000 of King Henry's subjects suffered death during the thirty-seven years of his sovereignty. In the reigns of his successors, Edward VI., Mary, and Elizabeth, various expedients were resorted to by the legislature, to check the growing progress of poverty and crime, one of which was an enactment for the raising of poor rates, (5 Eliz. c. 3), afterwards more fully carried out in a subsequent act (43 Eliz. c. 2.), and another very important measure was the first decree by which banishment from the kingdom was ordained as the punishment of rogues and vagabonds. In this act,

passed in the 39th year of the reign of Queen Elizabeth, the place of exile is not named.

In 1619, during the reign of James I., the practice of transporting convicts to America commenced, criminals being also in many instances allowed to transport themselves. An act of parliament (18 Charles II. c. 3.), empowered the judges to exile for life "the moss troopers of Cumberland and Northumberland" to any of His Majesty's possessions in America.

In 1717 an act of parliament was passed, (4 Geo. II. c. 11.), which recited the inefficiency of the general punishments then in use, and stated that, "in many of His Majesty's colonies and plantations in America, there was a great want of servants, who, by their labour and industry might be the means of improving and making the said colonies and plantations more useful to this nation." Under this act the prerogative of the crown to pardon was restricted by requiring as a condition, that before a convict who had once been assigned to a planter could avail himself of it, he should make compensation to his master for the loss of his services.

By virtue of this enactment, a shameful course of conduct was adopted in the disposal of the wretched prisoners, who were in fact sold into slavery at the average rate of twenty pounds per head; the numbers transported being about 2,000 per annum. The separation of the United States from England, put an end to this system, and the prisons becoming crowded, various expedients were suggested and resorted to for the relief of the country; among others that of conveying convicts to the west coast of Africa, there, according to the either ignorant or wantonly cruel proposition of some persons, to be turned loose among the unhappy negroes; the building of large penitentiaries was also strongly advocated; but

both these plans were abandoned, the one on account of the unhealthiness of the climate, the other by reason of the expense attending it, and its inefficiency in reclaiming offenders, to whose condition, Howard, and other christian philanthropists had strongly directed the attention of the nation.

At this critical juncture of affairs, the favourable description given by captain Cook of that part of New Holland which he had discovered and named New South Wales, determined the government to attempt the formation of a penal settlement at Botany Bay (so called by Sir Joseph Banks when there), as a means of attaining the following desirable ends:—1st. To rid the mother country of the yearly increasing number of prisoners who were accumulating in the gaols; 2nd. To afford a proper place for the safe custody and punishment of the criminals, as well as for their progressive and ultimate reformation; and, 3rd. To form a free colony out of the materials which the reformed prisoners would supply, in addition to families of free emigrants who might settle in the country from time to time.

In the twenty-fourth year of the reign of George III., an act of parliament was passed, which empowered his Majesty in Council to appoint to what place beyond the seas, either within or without his Majesty's dominions, offenders should be transported; and by two orders in Council, dated 6th December, 1786, the eastern coast of Australia, and the adjacent islands, were fixed upon as the places of banishment.

The small fleet destined for the conveyance of the exiles, consisting of the *Sirius* (a frigate), the *Supply* (an armed tender), three store ships, and six transports, assembled at the Isle of Wight, having on board 565 male, and 192 female convicts, with a guard, consisting of a major-commandant, three captains, twelve subalterns, twenty-four non-commissioned officers, and 168 privates, all of the royal marines, together with forty of the marines' wives and their children, and provisions and stores for two years. Captain Arthur Phillip, R.N., an experienced officer, was appointed governor of the projected colony, and commander of the expedition, which left the shores of England on the 13th of May, 1787, touched for supplies and stock at Teneriffe, Rio de Janeiro, and the Cape of Good Hope, and arrived, in safety, at Botany Bay, in January, 1788, after a voyage of upwards of eight

months, of which, however, four weeks were spent at the Cape of Good Hope.

On landing, governor Phillip was received by an armed body of the natives, but on seeing him approach, alone and without any weapon, they returned his confidence by laying down their own, and receiving him in a very friendly manner. On proceeding to examine the bay, he soon found, that though extensive, it was ill-adapted for the foundation of a large settlement, being open to the full sweep of the easterly winds, which rolled a tremendous sea on the beach, and the greater portion of the land, moreover, though delightful for botanizing, was found to be little better than a series of swamps and sterile sand, very badly supplied with water. Little suspecting the close vicinity of one of the finest harbours in the world, captain Phillip resolved to examine what captain Cook had termed Broken Bay, where the Hawkesbury disembogues; but, on his way thither, he stopped to investigate an inlet, marked in the chart as a boat harbour, to which (appearing of little importance) captain Cook had given the name of Port Jackson, from the seaman on the look-out, by whom it was descried. On passing the lofty headlands which form the entrance of this "boat harbour," the astonishment of the governor may be conceived, when he found himself in a haven in which the whole of the British navy might securely ride at anchor, navigable for vessels of any burthen fifteen miles from its mouth, indented with numerous coves, and sheltered from every wind. Thither the fleet was immediately removed; and, on the 26th of January, 1788, the British flag was hoisted on the shores of Sydney cove, then thinly wooded, and abounding in kangaroos. The silence and solitude of the forest were soon broken by the resounding stroke of the woodman's axe; the ground was cleared, tents pitched, the live stock (consisting of one bull, four cows, one bull-calf, one stallion, three mares, and three colts) landed, stores deposited, and the little colony (numbering 1,030 souls) established. Farms were laid out at Rose Hill (Parramatta) and other places; every encouragement was given to raise the means of sustenance from the soil, and a few convicts were emancipated, and obtained grants of lands as settlers. The governor having also received orders to form a settlement at Norfolk Island, with a view to the cultivation of the flax plant, which captain Cook had found growing there most

luxuriantly, the *Supply* sailed for that place in February, (1788) with lieutenant King as superintendent, accompanied by one surgeon, one petty officer, two private soldiers, two persons supposed to have some knowledge of flax dressing, and nine male and six female convicts with tents, implements for husbandry, tools for dressing flax, and provisions for six months. The *Supply* on its return to Port Jackson, (having been absent five weeks and two days) reported the extreme difficulty found in landing on Norfolk Island, and the unfortunate loss of five lives thereby, but brought most favourable accounts of the richness of the soil and salubrity of the climate. Meanwhile great and increasing difficulties were experienced by the infant colony at Sydney Cove, the scurvy broke out among the convicts, and resisted every attempt made to check its progress by medicine, while the evil tendencies of their minds, repressed in some degree during the voyage, and their rooted habits of idleness, became daily more manifest.

Among the numerous disappointments which the governor, notwithstanding the most strenuous exertions was doomed to experience, not the least was the frustration of his hopes of maintaining a friendly intercourse with the natives. M. de la Pérouse, (see p. 367) while he remained in Botany Bay, had some quarrel with the natives, in which he was unfortunately obliged to use his fire arms, and this affair, together with the ill behaviour of some of the convicts, who, in spite of all prohibitions had wandered among them, produced a shyness on the part of the aborigines which resulted in open enmity. The soil around Sydney Cove was found to be extremely sterile, so that the possibility of immediately raising sufficient grain for the settlement was out of the question, the cattle were lost through the neglect of the person in charge; while the conduct of the prisoners was too often very detrimental to the public weal, theft being general, and desertion into the woods not unfrequent. At one time forty persons were absent from the settlement *on their road to China!* These travellers consisted principally of Irish convicts, who being possessed with the idea that China was not far distant to the northward, were always making up parties for the purpose of de-camping thither. Most of the wanderers perished of hunger, or were speared, and probably eaten by the natives. An anecdote is told of one who, after traversing the

woods near Sydney for several weeks, endeavouring to find the road to China, had not only lost his way, but, as is often the case when the traveller is bewildered in a forest, lost also his senses. As good luck would have it, Pat, almost famishing, reached what he thought a Chinese town; instinct drew him towards one bark hut in particular, which he cautiously approached, and was most agreeably astonished to find his wife, whom he joyously hailed with, "Oh! Judy dear, how did *you* find your way to China?" The number of natives who then resorted to the shores of Port Jackson to fish or hunt was considerable, and hostilities soon commenced between them and the new comers, in the course of which many cruelties on both sides were committed.

The *Sirius*, which had been despatched to the Cape of Good Hope for flour, returned in May, 1789, and although the supply she brought was not very large, as the ordinary rations of four months would exhaust it, yet it seemed to gladden every heart, and remove for a time the dependency which was rapidly gaining ground.

On the 4th of June, 1789, the second anniversary of his Majesty's birthday commemorated in this country, the governor endeavoured, as he had done on the previous occasion, to foster a loyal spirit by making it a day of rejoicing, and the convicts were permitted to perform Farquhar's comedy, "the Recruiting Officer;" the prologue spoken on the occasion contained a pertinent allusion to their own position in the words,

"True patriots we, for be it understood,

We left our country for our country's good."

In spite, however, of every effort to disguise or meet them, difficulties increased at Sydney, and the accounts from Norfolk Island continuing favourable, it was thought advisable to divide the colony. In February, 1790, a large body of convicts (above 200) together with two companies of marines, were ordered thither, on board the *Sirius* and the *Supply*. A serious evil, the injurious consequences of which were long felt in the colony, attended this measure. It being found that stock was improvidently killed, an order was given to prevent the further destruction of an article so essential in the present state of affairs, (the government rations having been thrice reduced since the beginning of November) until some necessary regulations could be published; but the officers and people who were about to embark were not included in this

prohibition. The mention of *future necessary regulations*, gave rise to an opinion among the convicts that on the departure of the ships, all the live stock in the colony would be called in, or that the owners would be deprived of the benefits which might result from its possession, and, under the pretence of its belonging to those who were exempted by the late order, nearly all the stock in the settlement was destroyed in the course of a few nights.

Another heavy disaster resulted from this unfortunate expedition, for the *Sirius*, which on its return was immediately to have proceeded to China for supplies, was lost with all the provisions which had been sent with the convicts, upon a reef at Norfolk Island; her officers, crew, and convicts were however all saved, having been dragged on shore, through the surf, on a grating. Owing to the increase of population without any corresponding augmentation of provisions, the inhabitants of Norfolk Island were on the eve of perishing, but for the unexpected relief afforded by a flight of aquatic birds which alighted on the island, to lay their eggs. Owing to the length of their pinions, these birds take wing with difficulty; and their numbers were so great, that for two months the settlers caught at least from 2,000 to 3,000 every night, and also procured an incalculable quantity of eggs; thus these "*birds of Providence*" saved the lives of the people.

To return to the principal settlement. The long-looked for ships from England did not arrive, and the necessity for procuring succour becoming daily more urgent, on the 17th of April, 1790, the *Supply* was sent to seek relief from Batavia. On the 20th of April the miserable ration issued from the public store to each man for seven days, was—flour, 2½ lbs.; rice, 2 lbs.; pork, 2 lbs.; and of this sadly insufficient ration, the pork, from the length of time that it had been in store, had shrunk away to nearly nothing. The manly and unselfish conduct of the governor had been throughout remarkable, but it was especially manifested during this season of severe trial; he gave up three hundred weight of flour which was his private property, declaring, that although it was not in his power to remove the want felt by the convicts, they might at least know that it was equally experienced even at the government house; and to this resolution he rigidly adhered. Every exertion was made to procure food by hunting and fishing; but, from the former pursuit, little benefit resulted,

only three small kangaroos being brought in at the end of a month by the persons employed to shoot for the settlement; and the food obtained from the latter was not often more than equal to supplying the people employed in the boats with one pound of fish per man, which was allowed them in addition to their ration. Even this scanty resource seemed likely to fail them in their greatest need; for on the first and second days of June, (their seasons, be it recollected, being exactly opposite to ours,) the stormy weather prevented fishing, and threatened to continue throughout the third day. The wretched people seemed destined to drink to the dregs the bitter cup of hope deferred.

They had long, and, as the event proved, rightly conjectured, that the non-arrival of supplies could not be owing to the wilful neglect of the home government, but must be consequent upon some unforeseen delay or fatal accident. Their worst fears received a speedy confirmation. On the afternoon of the 3rd of June, the long-looked-for signal was made for a ship at the South Head, which proved to be the *Lady Juliana* transport from Plymouth, not bearing the much-desired cargo of provisions, but laden, in its place, with 220 female convicts, and bringing to the unfortunate colonists intelligence of the loss of the store ship sent by government for their assistance. The *Guardian*, a forty-four gun ship, commanded by lieutenant Riou, had sailed from England in September, 1789, richly freighted with two years' provisions for the settlement, and an immense variety of all manner of stores. She had reached the Cape of Good Hope in safety, had there taken on board a quantity of stock for the settlement, and completed a garden, which had been prepared under the immediate inspection of Sir Joseph Banks, and contained 150 of the finest fruit trees. Leaving the Cape, the *Guardian* proceeded on her way; but on the 23rd of December she struck upon an iceberg in 45° 54' S. lat., 41° 30' E. long., and thereby received so much injury, that lieutenant Riou, to save her from instantly sinking, was compelled to throw overboard the greatest part of her valuable cargo. The stock was killed, the garden destroyed, and most of the passengers and crew left her, in five boats, four of which were never afterwards heard of; the fifth, with much difficulty, reached the Mauritius. Lieutenant Riou remained behind, resolved to sink with his vessel; but it was

otherwise ordained; and his life, preserved for a time, was eventually sacrificed for his country at Copenhagen, and the *Guardian*, with the loss of masts and rudder, after having been tossed about for several days, at the mercy of every gale, was fallen in with by a French frigate, near the Cape of Good Hope, and towed into Table Bay, where such of her stores as yet remained were landed.

In addition to the above disastrous tidings, the disappointed colonists were informed that 1,000 convicts might be shortly expected, and little benefit even of a temporary nature was consequent upon the arrival of the *Juliana*, the supply of provisions on board her being so inconsiderable as to justify only the addition of one pound and a half of flour being made to the weekly ration. A deep gloom, enhanced by the frustration of their hopes, when they were apparently on the eve of realization, overspread every countenance; but effectual relief was near at hand, on the 20th of the same month the *Justinia* arrived from England with a large cargo of provisions and stores. A few days after three transports, laden with the convicts whose coming had been announced by the *Juliana*, reached Port Jackson; 274 of these unhappy people had perished during the voyage, and disease was so rife among them that, according to lieutenant-colonel Collins, several of them died in the boats as they were being rowed to shore, or on the wharf as they were lifted out of the boats; both the living and the dead exhibited more horrid spectacles than had ever been witnessed in that country. Apart from the distressing state of the criminals themselves, the arrival of the transports was in other respects beneficial; for in addition to the provisions brought by them from England, were 400 tierces of beef, and 200 tierces of pork, saved from the *Guardian*, and put on board at the Cape of Good Hope, and all anxiety respecting the stores was subsequently set at rest by the adoption of a more regular system in the forwarding of supplies. The aspect of affairs began to brighten, the lines for a regular town were laid out, various public buildings commenced, and the non-commissioned officers and privates of the marines were encouraged in becoming settlers by grants of land. In September, 1791, H.M.S. *Gorgon* arrived at Sydney, convoying ten vessels, which formed what is termed the second fleet, the whole containing 1,695 male and 168 female convicts; upwards of 200 having died

during the voyage. In the December of the following year, governor Phillip, whose health was seriously impaired, left the colony which for nearly five years he had superintended with untiring zeal. To the firm but merciful and just policy which he consistently maintained, notwithstanding the varied difficulties of a most arduous position, may be attributed, under Providence, the successful issue of the infant settlement from the trials which so frequently threatened its destruction.

After the departure of governor Phillip, captain Grose administered the affairs of the colony, as lieutenant-governor, until the arrival of the new governor-general, captain Hunter, in September, 1795, who, it will be remembered, had previously commanded the *Sirius* frigate, when the settlement was first formed. Governor Hunter appears to have been an honest straight-forward sailor; his administration lasted five years, during which period the colony made considerable progress. Settlers occasionally arrived from England, and the accession of a regiment called the "New South Wales Corps" (afterwards the 102nd of the line) was beneficial in many respects.

The officers of this corps were much blamed by a portion of the population for engaging in mercantile pursuits instead of confining themselves strictly to the duties of their profession. In this censure Dr. Lang unites, but he appears to overlook the peculiar circumstances in which these gentlemen were placed, having nothing but their pay and convict rations to rely on for the support of themselves and their families. The price of provisions was at that period very high, wheat being 12s. a bushel, mutton 2s. a pound; a cow fetching £80, and so on in proportion. (See *Collin's Account of New South Wales*, p. 333.) This state of things compelled them to import their own supplies, and rear their own stock, and it was fortunate for the colony that they were enabled to do so. The total number of inhabitants, free and bond, was, on captain Hunter's departure in September, 1800, about 8,000; of these about 2,500 were stationed at Sydney, and the remainder at the agricultural establishments at Parramatta, Prospect, Toongabbee, and Castlehill. Captain King, R.N., who as lieutenant of the *Sirius*, had effected the settlement on Norfolk Island, was appointed to succeed Captain Hunter: his administration lasted for six years, and was distinguished by what is termed the

"Irish rebellion." Several hundred convicts, attached to the establishment at Castle-hill, twenty miles from Sydney, struck for their liberty; but being armed only with pikes, were, after a very brief contest, discomfited by the military at Vinegar Hill, a few miles from Parramatta, on the Hawkesbury road; a few were shot by the troops, some of the leaders taken and hanged immediately, and the rest returned quietly to their labour. This is the only instance of an insurrection of the convict population since the foundation of the settlement.

Governor King met with much opposition, and though zealous and conscientious, does not seem to have been adequate to the magnitude of his trust. A circumstance is said to have occurred during his tenure of office very characteristic of the then predominating genius of Botany Bay. Charges of a serious nature having been preferred against a gentleman in the colony, despatches relating thereto were prepared, to be forwarded to the secretary of state in England, but, the officer who had charge of them imprudently mentioned their contents, and the box when opened in due form in Downing-street, was found to contain only a bundle of newspapers, the criminating despatches having been adroitly abstracted from it before leaving Sydney. Captain Bligh, whose name is handed down with infamy to posterity, by reason of his tyrannical treatment of Christian and his comrades in H.M.S. *Bounty*, when sent to convey the bread fruit tree from the South Sea islands to the West Indies, was appointed to succeed captain King. The selection was singularly ill-judged, for a man who, notwithstanding his undoubted skill as a mariner, had shown himself incapable of governing a small ship's company, was clearly unfit to be trusted with arbitrary power in New South Wales, Captain Bligh's conduct there was only too much in accordance with his previous life. The former results of his tyrannical proceedings, appear to have utterly failed in teaching him either the duty or expediency of pursuing a different course of policy, for on entering his new position he behaved towards the whole population as if it had been entirely composed of criminals with abject minds; treated the officers of the New South Wales corps and the most respectable settlers with marked contempt, and was the first to trample under foot the rights which it was his especial duty to uphold. One individual in particular experienced from the governor an unwarrantable

series of persecutions. This gentleman, Mr. John M'Arthur, had obtained the name of the "Father of the Colony," and well did he deserve the appellation for the untiring zeal with which he strove to augment the resources, and raise the position of the land he had chosen for his home, stimulating the dormant energies of those about him by his own example, and aiding the poor by wealth honourably acquired during a long and extraordinarily active life. The oppressive and unjust sway of governor Bligh was endured by the colonists for eighteen months, but at length it became intolerable, and on the 26th of January, 1808, they rose with one accord, and, as with a single voice, having declared his deposition, vested the supreme authority in the hands of lieutenant-colonel Johnstone, the senior officer in command of the troops. The arrest of the governor having been resolved upon, the soldiers marched up to the Government House, with their officers at their head, to arrest the governor, who after a long search was discovered concealed under a servant's bed, in an upper chamber, covered with flue, and trembling with apprehension. Like most tyrants he was entirely devoid of moral courage, and it was a considerable time before he could be convinced that his life was in safety from the vengeance of the populace. Both his person and property were, however, carefully guarded, and after some time he embarked for England on board the *Porpoise* sloop of war.

From this period naval officers were no longer selected as governors. Lieutenant-colonel (afterwards major-general) Lachlan Macquarie was next appointed. The New South Wales regiment was ordered to England, and the regular troops of the line placed on the "roster" for service in the colony. During governor Macquarie's administration of twelve years, the settlement made great progress; the population was increased by numerous convicts and some emigrants, and by the aid of a *carte blanche* on the British treasury, many public buildings were erected—roads constructed—the fine Bathurst country over the Blue Mountains explored, and several government farms established. The convict population received great encouragement from general Macquarie; his maxim being to endeavour to induce every convict to consider his European life as a past existence, and his Australian one an entirely new, in which career he would find honesty to be the best policy,

and good conduct ensure its reward. This was his grand principle of government; but, like most men, strongly imbued with a favourite view, it sometimes led him too far. The emancipated convicts received from him an undue share of patronage—some he made magistrates, gave others colonial situations, and distributed among them large quantities of land. Truly philanthropic as were the motives which dictated his conduct, there yet appears reason to regret that governor Macquarie did not exercise more discrimination in his choice of individuals deserving of encouragement, and greater consideration for the feelings or prejudices of the free settlers, from whom he could not reasonably expect an entire appreciation of his own views; and from hence is said to have arisen the formation of two parties in the colony—the *exclusionists* and the *emancipists*, (or freed convicts,) who continued for many years engaged in active opposition to each other.

Major-general Sir Thomas Brisbane, who succeeded governor Macquarie in 1821, was an amiable and scientific man, but deficient in energy of character; his successor, lieutenant-general Sir Ralph Darling, possessed considerable ability, and strongly desired to benefit the colony; but his long employment at the "Horse-Guards," (a school well fitted for the inculcation of military discipline, but ill-calculated to prepare the mind to grapple successfully with the heterogeneous elements of which the society of New South Wales was composed,) and his previous government of a slave colony (the Mauritius), did not tend to qualify him for the exercise of the peculiar authority then vested in the governors of this semi-penal settlement. Intimate and personal knowledge of general Darling, both in his public and private capacity, seems to entitle me to bear testimony to his administrative abilities—to his remarkable aptitude for the despatch of public business, and high integrity of character. When officially employed in the colonial secretary's office at Sydney, and confidentially entrusted by the excellent secretary of the colony, the honourable Alexander M'Leay, with the drafting of the governor's despatches and letters, I had frequent opportunities of scrutinizing the motives which actuated the conduct of the governor, then violently attacked and maligned. From the example of lady Darling great benefit resulted. In conjunction with the governor and her family, she attended divine service

twice on every sabbath—that sacred day being, for the first time in the annals of the colony, duly observed at the government house; and in the charitable institutions which she set on foot, as well as the influence she exercised on the social habits and domestic peace of the colony, were forcibly illustrated how much both the present and prospective happiness of a community may be promoted by the righteous conduct of those set in high places.

The administration of the subsequent governors—major-general Sir R. Bourke, Sir George Gipps, and Sir Charles Augustus Fitzroy, does not require any particular mention. As is the case in all colonies, during the period of their passing from individual to constitutional rule, their governors had many difficulties to contend with, which, however, have been surmounted with remarkable success. The first step of a Legislative Council, partly nominated by the crown, and partly elective, was taken in the year 1840. That measure proved eminently successful, and has prepared the colonists for a constitution and responsible government, which has been granted by the crown and imperial legislature.

The colony has passed through periods of alternate prosperity and depression, in some instances arising from long-continued droughts, and in others from the too great speculation, consequent on the rapid acquisition of wealth. During a recent season of distress, sheep, the staple property of the colonists, were reduced to the price of two shillings and sixpence each, and every other commodity, or representative of value, was proportionably depreciated. Large quantities of sheep and horned cattle were boiled down merely for the sake of the tallow thus produced, and a new and lucrative article of export was thus created.

The colonists are now slowly recovering from four years of continued adversity; and, grown wiser by experience, they will not, it is to be hoped, again rush into foolish speculations, or engage in ruinous projects; at least, for some years to come, their enterprise and exertions are most likely to be characterized by prudence. But whether suffering from unpropitious seasons, or from the consequences of their own imprudence; or elated by riches and rapid progress, the colonists of New South Wales have, from the first, evinced a loyal attachment to the parent state—an ardent desire to participate in its glories, and an anxious wish to be

deemed worthy of the possession of those free and christian privileges which it is in the power of the crown and legislature of Britain to grant. [See Supplement.]

TRANSPORTATION, CONVICT DISCIPLINE, RELIGIOUS INSTRUCTION, AND REFORMATION OF CRIME.—This highly important subject, both in a political and Christian aspect, necessarily claims consideration in a work treating of a settlement once solely penal—but now totally devoid of a convict population; and the leading facts connected therewith, deserve record not only as composing a portion of the history of the past, fraught with warnings of the most serious nature, but also as affording incontrovertible evidence that England, notwithstanding her shortcomings as a Christian nation, has yet (at least in some degree) awakened to a sense of her responsibility as such. To be convinced of this, it needs but to look back upon her general conduct at the close of the last and the early part of the present century, with regard to the subject now under review, and compare it with the different line of policy now pursued.

In 1787, England, her statesmen, her philanthropists, and public opinion, through its organ the press, while evincing considerable solicitude for their temporal welfare, utterly disregarded the spiritual wants of the expatriated criminals sent to found a penal settlement at the antipodes, and also of those employed to guard and govern the erring wanderers.

The Rev. Samuel Marsden, the much esteemed chaplain of New South Wales from 1794 to the period of his death in 1838, in whose domestic circle I had the privilege of witnessing the practice as well as hearing the inculcation of the precepts of the Gospel, thus records this astounding fact; I say astounding in reference to the convictions and actions of the British nation,—of its statesmen, legislators, press, and public opinion, at the present day. The reverend gentleman states that “when the fleet was on the point of sailing with the first convicts for New South Wales in the year 1787, *no clergyman had been thought of*, and that a friend of his own, a pious man of some influence, anxious for the spiritual welfare of the convicts, made a strong appeal to those in authority upon the subject, and through the interest of the late bishop Porteous with Sir Joseph Banks the Rev. Richard Johnston was appointed chaplain.” Judge Burton, in his excellent

work on the *State of Religion and Education in New South Wales*, published in 1840, when narrating this circumstance, states that “an oversight equally remarkable took place upon the recent expedition to Port Essington, (for the foundation of a new colony on the north-west coast of Australia) under the command of Sir Gordon Bremer, in H.M.S. *Alligator*, accompanied by the *Britomart* brig, lieutenant Stanley commander, (son of the late bishop of Norwich) which sailed from England with *five hundred souls*, unprovided with any minister of religion. There was no clergyman at the disposal of the bishop of Australia when the expedition reached Sydney on its way to the place of intended settlement, but his lordship furnished it with such means as were in his power, he caused a temporary church to be constructed, and bibles, prayer-books, and other religious publications to be supplied to Sir Gordon Bremer.” No Christian will be surprised to learn that misfortune, sickness, and death have been rife at Port Essington, and that now, in February, 1850, a British ship of war is on its way from Singapore to convey the ill-fated survivors away from a settlement in whose formation the ordinances of religion were entirely unprovided for and disregarded.

To return to New South Wales. It is true that one minister of religion did accompany the fleet of 1787, and well he performed the duties to the extent of his strength; he visited the sick and the convicts in their several abodes, and administered to them consolation and instruction. But his labours were far from being satisfactory to himself, or as useful as he wished them to his flock; while barracks, and other substantial structures were built for the use of man, no temple was reared for the worship of the living God. For nearly seven years divine service was celebrated in the open air, subject to all the inconveniences and interruptions arising from a changeable climate. At length the reverend gentleman caused a temporary place of worship to be constructed at his own expense, which was opened for public worship on the 25th of August, 1795; but the attendance was small, and up to the year 1800, when governor Hunter quitted the colony, there were few who evinced any religious feeling. [Evidence before the House of Commons in 1812.] On the return of the Rev. Mr. Johnston to England in 1800, the spiritual guidance of the colony, with its annually increasing num-

ber of convicts, was confided to one chaplain (the Rev. Samuel Marsden) for seven years. In 1803, when the population amounted to 7,097 men, women, and children, it was found that there were a large number of Roman catholics without any pastor. To remedy this serious evil, a convict named James Dixon, who, it was alleged, had formerly been in priest's orders, received a conditional emancipation, with permission to exercise clerical functions.

In 1807, the Rev. S. Marsden proceeded to England to endeavour to procure assistance for the ministry of the established church, and to advocate a Christian mission to New Zealand. The Rev. Mr. Fulton temporarily officiated during his absence. In 1808, the Rev. Mr. Cowper arrived; in 1809, the Rev. Mr. Cartwright; and in 1810, Mr. Marsden returned, but the labour of these four chaplains was still very severe in visiting the widely spread districts..

In 1817, when the population amounted to 17,214 souls, of whom 6,777 were convicts, dispersed over a large territory, there were but five chaplains. At this time only one church had been built at Sydney, and one at Paramatta; but so few persons attended divine service, that one of the early governors was informed of the fact, and being induced himself to attend the Sabbath worship, announced that "he expected his example would be followed by the people." With reference to the Roman catholic church, how long it was left under the superintendence of an emancipated convict, is not exactly known: in 1818, the Rev. Mr. Flynn was appointed archpriest at Sydney, with power to confirm; but on his arrival at New South Wales he was rejected by the local government, and sent home on the ground of his having come out unsanctioned by the civil authorities. Mr. Flynn left behind him in the house of a Roman catholic at Sydney a "consecrated wafer," the symbol of the Eucharist, and the sole spiritual consolation which the Roman catholics possessed until the year 1820, was the assembling round the "bread of life" to offer up their prayers; at length they were gratified by the arrival of the Rev. Mr. Therry, who for six years was the only Roman catholic priest for New South Wales and Van Diemen's island.

The Presbyterian church was equally neglected. Until 1826 no minister of this persuasion was appointed to a chaplaincy in the colony, although a Presbyterian church

had been erected on the banks of the Hawkesbury, in 1809, in which a Scotch settler officiated as catechist. To the meritorious and long-continued exertions of the Rev. Dr. Lang, the Presbyterians were, in 1824-5, indebted for some attention to their urgent wants.

In 1833 the population consisted of 60,794 souls, of whom 16,151 were convicts; the Protestants numbered 43,095, and the Roman catholics 17,238. The Church of England establishment then consisted of an archdeacon and fifteen chaplains, and within forty miles of Sydney there were seven stone or brick churches, two others in more remote parts of the colony, and several less permanent buildings. The Roman catholics had three clergymen, and the Presbyterians two. But so far was spiritual instruction from being deemed a necessity, for which it was the positive duty of government to provide, that Norfolk Island, with several hundred convicts, had no chaplain; and in Port Stephens, with a large body of convicts, and 100 free settlers, there was only an Irish convict schoolmaster. Under such circumstances it cannot be matter of surprise that crime rapidly increased in the colony; that the free emigrant population took alarm when they found, year after year, the convicts largely increased by augmenting deportations from England until their numbers equalled those of the emigrant class. The attention of the imperial parliament was called to the subject; it was said that transportation had failed, both as a punishment deterring from crime in England, and as a means of reformation in Australia, whereas it was the neglect of religious instruction, the total want of spiritual aid, the assignment of convicts to settlers who were themselves but recently emancipated, and who during their bondage had never heard the words of religion: it was these, and other radical defects, which had perverted the beneficial effects that might and probably would have arisen from a judicious system consistently carried out. The matter was first brought under public consideration by Mr. Justice Burton, one of the judges of the supreme court of New South Wales, in a charge which he delivered to the jury on the 18th November, 1835, a charge which at first exposed this eminent and pious judge to great and unmerited reprobation, but which under Providence eventually worked great good.

The following is an abstract of the facts

stated in this remarkable document, which soon attracted the attention of the government in England, as well as that of the Australian public. It was therein stated that—

“In 1833, there had been 135 capital convictions; on sixty-nine sentence of death had been passed; forty-five of those capital convictions, and fifteen of these sentences of death had taken place upon his (judge Burton’s) judicial responsibility.

“In 1834, 148 capital convictions, in eighty-three of which sentence of death had been passed, forty-eight of which convictions and thirty-six of which sentences had been before himself.

“In 1835, 116 capital convictions, and seventy-one sentences to suffer death, fifty-six of which convictions had taken place before him, and twenty-eight of which sentences he had passed. In addition to which sentences there are thirty-three prisoners who have been capitally convicted, waiting for sentence. Whether death might be recorded or passed upon them, the number of capital convictions was a feature sufficiently striking in the administration of justice in this colony; for it was to be remarked, that capital punishment had been taken away from several offences, such as forgery, cattle-stealing, stealing in a dwelling-house above the value of £5 (those fruitful sources of capital convictions in former times), ever since the 1st of August, 1833, so that those which had taken place since that time were all for crimes of violence, murder, rape, robbery, burglary, maliciously stabbing, shooting, and wounding, and offences of similar character.

“The calendar of the present sessions (1835) presented the following facts:—There had been convicted of murder, 2; stabbing with intent, &c., shooting at with intent to kill, cutting and maiming, assault with intent to do bodily harm, 6; manslaughter, 2; arson, 1; piracy and burglary, 8; housebreaking, 10; highway robbery, 7; receiving, 1; forgery, 2; larceny on the high seas, 1; larceny, 4; cattle-stealing, 1; piracy only, 1; robbery, 8—total, 54.

“Prisoners in gaol on the 18th of November, 1835, who had been in custody previous to the 2nd of November, 1835, viz.—For trial on the 18th, 7; quarter sessions, 6th December, 39; stand for next criminal session, 13; for discharge, 3; consideration, 19—total, 81. Tried on the 18th, 7; convicted, cattle stealing, 2; robbery and receiving, death recorded, 4; acquitted, 1—total, 7.

“The picture presented was one of the most painful description: it would appear, to one who could look down upon the community, as if the main business of all were the commission of crime and the punishment of it; as if the whole colony were continually in motion towards the several courts of justice, and the most painful reflection of all must be, that so many capital sentences and the execution of them have not had the effect of preventing crime by way of example.

“In his (judge Burton’s) opinion, one grand cause of such a state of things was, an overwhelming defect of religious principle in this community; a principle which he considered as the polar star to guide a man in all his conduct, and without which none other would prevent him from crime. But that he might not be said to make so grave a charge upon light foundations, he would instance the crimes of violence, the murders, the manslaughters in drunken revels, the perjuries, the false witnesses from motives of revenge or reward, which in the proceedings before

him had been brought to light. Many instances upon his notes of evidence in cases tried before him, had brought him to the conclusion that there is an overwhelming defect of religious principle in this colony.

“He could not but acknowledge there was a deficiency of religious instruction in the colony. There was not that number of religious teachers its extent and population required. He did not intend to impute blame to any one individually. But when he imputed a want of religious principle, he looked around to see whether there was an adequacy of religious instruction in order to point their attention to this circumstance; so that if they found a deficiency, they might call upon the proper authorities to make such an addition as necessity required. There were at present only thirty such persons for the whole of this scattered population, independent of a few whom the charity of societies in England had supplied—a number too scanty to admit of any being spared for the penal settlements. It had been his lot to visit one of those penal settlements. To see them herding together without any chance of improvement, without any religious instruction, was painful in the extreme. One man particularly had observed, in a manner which drew tears from his eyes and wrung his heart when he was placed before him for sentence, ‘Let a man be what he will when he comes here, he is soon as bad as the rest; a man’s heart is taken from him, and there is given to him the heart of a beast.’ He did not impute blame to any one, and he trusted no such motives would be ascribed to him; but in a question of such vital importance, which involved not only the present but the ultimate welfare and security of the colony, all were interested; and it was the duty of every one to do what he could to ameliorate, if possible, its present condition. He only stated the fact, and lamented it.

“He felt, however, bound to say, that masters of convicts were not sufficiently attentive to the morals of their men; defective as our means of religious instruction might be, it had been proved before him, that highly respectable persons, residing near to a church in the same town, and within a few miles, not only neglected to oblige them to attend the church, but actually suffered them to spend the Lord’s day amidst scenes of drunkenness and debauchery. Nor was that all. It had been further proved that the Lord’s day, by some masters, was made a day of labour, and that some other day was allowed to them as an equivalent. But what equivalent, he would ask, could a master give for the loss of that moral instruction which the security of society required? There were, doubtless, many who, being under the necessity of attending a distant service, could not take their servants; but he would ask whether, in such situations, they did all which they could? He would ask, what was the example which had been set by them? What instruction did they give them? It was in every man’s power to set an example of moral conduct, and observance of the Lord’s day, in his own person, and to gather his family and servants together for divine worship, whether a church was near or distant. And he would farther beg to impress upon their minds, that they were not in a situation to blame others for want of moral instruction so long as they did not avail themselves of such means as were already within their power. He was sorry to say, that many of the worst crimes which had been brought under his notice were committed on the Lord’s day, and he was led to apprehend, that

there was a very general disregard and desecration of it. There were other causes which led, in his opinion, to crime in this country. With respect to them there might be a difference of opinion; he could only say that he had formed his own; and as he was prepared to give it to the governor, he should be wanting in candour if he did not state it to them.

“He had been induced, by what had been proved before him in that court, gravely to consider the question of convicts working in gangs out of irons, and felt convinced it was one of the most fruitful sources of crime to be found in the colony. He had before him a return, from which it appeared that the number of convicts at this time employed upon the roads is 2,240, of whom 1,104 are out of irons! and (he continued) when they, the jury, considered who these latter men were, and what they had been—placed under the guardianship of a convict overseer; that they left their huts in any number, armed or unarmed as they pleased—in short, from the evidence he had upon his notes respecting the conduct of the road parties of the colony, it would appear that those establishments were like bee-hives, the inhabitants busily pouring in and out, but with this difference—the one works by day, the other by night; the one goes forth to industry, the other to plunder. To the carelessness or worse conduct of overseers, he did attribute a vast proportion of the burglaries and robberies that were committed in the country districts. It had been proved in a recent case, (he spoke from his notes), that a party of these men had committed a robbery, under such circumstances of aggravation, that sentence of death had been passed upon four of them. He must, however, say, that the settlers were themselves to blame for many of the crimes committed by convicts belonging to road parties. They too frequently appear to have employed these men in their leisure or working hours, or on a Sunday, paying them for their labour in money, which was spent in drink, and so prepared them for the commission of crimes.

“He must press upon their attention, considering the nature of the population of this colony—the fact that men are passing daily from one class to another—what must be the effect upon those institutions, and of men passing from one class to another without moral improvement? To himself it appeared, that it must be the total corruption of them all. In that point of view alone the subject was well worthy their grave attention. Free institutions could only be appreciated and enjoyed by the virtuous; coercion was for the depraved; and a vicious people have never continued to be free. He stated, that he felt he need do no more to impress upon all their minds the necessity there was for exercising all their influence to procure the moral improvement of those persons who are committed to their trust, and their utmost vigilance and superintendence over them to restrain them from crime, than draw their attention to the comparative numbers of the free and convicts in this colony, and to the fact, that the tide of convict population still sets strongly here, whilst that of free emigration appears feebly to reach our shores. He stated, that it appears from the census taken in September, 1833, published in the next government *Gazette* after the 31st December, 1833, that it was there estimated that there were in this colony—free males, above twelve years of age, 17,578; convict males, 21,845: and that he had been informed, that the number of free emigrants since arrived, up to

November, 1835, has been 2,800, of whom 900 are men, the rest being women and children; and that the number of convicts arrived since the same time has been 8,163, of whom 7,357 are males. He trusted they would take with them to their homes the facts he had stated, and the opinions he had expressed, and communicate them to their neighbours, so that each might judge for himself as to the justness of his views. The facts themselves he had drawn from what had come before him in evidence, and as such he put them. He sincerely hoped they would have proper weight upon the minds of every one to whom they were stated; and that as he had taken this opportunity of inquiring, on his part, what he had done during the last three years, each one of them would also consider what he had been doing during the same period.”

But not only did the judge on the bench warn his Majesty's government of the spiritual destitution of the colony, the archdeacon (Broughton) of New South Wales proceeded to England in 1834 for a similar purpose; in February, 1835, this exemplary divine made a statement to the *Christian Knowledge Society* and to the *Society for the Propagation of Christian Knowledge*, when £3,000 was immediately placed at his disposal by the first-named society, and £1,000 by the latter. New South Wales was erected into a diocese, but bishop Broughton had the mortification of returning to the colony unaccompanied by a single clergyman, “owing to the refusal of his Majesty's government to sanction any allowance towards the expense of the passage, or residence, or means of support of any additional clergymen.” This determination apparently arose, according to the first report of the Australian Diocesan Committee, from a prevailing impression that the inhabitants of the colony were opposed or at least indifferent to an extension of the ordinances of the church of England, whereas the reverse was the case. Although in some places the rites of religion were only performed monthly, in others *half-yearly*, and notwithstanding that the population had doubled between 1829 and 1837, and become much more widely scattered over the country, only two additional clergymen had been appointed from England.

Public opinion was now, however, strongly directed to the question of secondary punishments; the inefficiency of transportation, as a preventive of crime, was powerfully urged by the archbishop of Dublin (Dr. Whately) and other eminent persons, and a very unfavourable feeling was created against New South Wales, both as a penal settlement and as a colony to which respectable emigrants might resort. In the years 1837 and 1838 a select committee of the House of Commons

was therefore appointed to consider on this highly important subject, and although the evidence was to a great extent partial, yet many valuable facts were adduced deserving of record in a work of this nature.

From the report of the transportation committee of the House of Commons in 1838, it appears that "75,200 convicts have been transported to New South Wales since its settlement in 1787:—on the average of the last five years, 3,544 offenders have been annually sent there; and the whole convict population of the colony in 1836 amounted to 25,254 men and 2,577 women, in all 27,831. To Van Diemen's Island 27,759 convicts have been sent since the year 1817; the number annually transported there, on the average of the last five years, is 2,078; and the convict population in 1835 was 14,914 men and 2,054 women. At Norfolk Island the number of convicts, most of whom had been retransported for offences committed in New South Wales, was in 1837 above 1,200."

The plan formerly adopted in reference to Australian convicts is thus described by the transportation committee of 1838:—

"After sentence of transportation has been passed, convicts are sent to the hulks or gaols, where they remain till the period of their departure arrives. On board convict vessels the convicts are under the sole control of the surgeon-superintendent, who is furnished with instructions, as to his conduct, from the Admiralty. The precautions which have been taken against disease, and the better discipline now preserved in these ships, have applied an effectual remedy to the physical evils of the long voyage to Australia, and prevented the mortality amongst the prisoners, which prevailed to a fearful extent during the earlier periods of transportation. Little diminution, however, has taken place in those moral evils, which seem to be the necessary consequences of the close contact and communication between so many criminals, both during the period of confinement previous to embarkation, and during the weariness of a long voyage.

"As soon as a convict vessel reaches its place of destination, a report is made by the surgeon-superintendent to the governor. A day is then appointed for the colonial secretary, or for his deputy, to go on board, to muster the convicts, and to hear their complaints if they have any to make. The male convicts are, subsequently, removed to the convict barracks; the females to the penitentiaries. In New South Wales, however, regulations have lately been established, by which, in most cases, female convicts are enabled to proceed at once from the ship to private service. It is the duty of an officer, called the principal superintendent of convicts, to classify the newly-arrived convicts; the greater portion of whom are distributed amongst the settlers as assigned servants; the remainder are either retained in the employment of the government, or some few of them are sent to the penal settlements.

"In 1836 the number of assigned convicts in Van Diemen's Land was 6,475; in New South Wales in 1835 the number was 20,207. In the earlier periods

of the colony of New South Wales the supply of convicts so much exceeded the demand for their services by the settlers, that the government used to grant certain indulgences to those settlers who were willing to maintain convicts. More recently, the demand has exceeded the supply; the obtaining convict labourers has become, therefore, to a certain degree a matter of favour, which has given rise to complaints of abuse in the distribution, especially of the more valuable convicts. All applications for convicts are now made to an officer, called the commissioner for the assignment of convict servants, who is guided in his distribution of them by certain government regulations. Settlers, to whom convicts are assigned, are bound to send for them within a certain period of time, and to pay the sum of £1 a head for the clothing and bedding of each assigned convict. An assigned convict is entitled to a fixed amount of food and clothing, consisting, in New South Wales, of 12 lbs. of wheat, or of an equivalent in flour and maize meal, 7 lbs. of mutton or beef, or 4½ lbs. of salt pork, 2 oz. of salt, and 2 oz. of soap weekly; two frocks or jackets, three shirts, two pair of trousers, three pair of shoes, and a hat or a cap, annually. Each man is likewise supplied with one good blanket, and a palliase or wool mattress, which are considered the property of the master. Any articles, which the master may supply beyond these, are voluntary indulgences. The allowance in Van Diemen's Land differs in some particulars, and on the whole is more liberal.

"Male assigned convicts may be classed under the various heads of field labourers, domestic servants, and mechanics: the services of the last class being of more value than those of the two former, are estimated in assignment as equal to those of two or more field labourers. In the assignment of convicts scarcely any distinction is made either on account of the period of the sentence, or on account of the age, the character, or the nature of the offence of the convict. The previous occupation of a convict in this country mainly determines his condition in the penal colonies. For instance, domestic servants, transported for any offence, are assigned as domestic servants in Australia: for the greater portion of such servants in those colonies, even in the establishments of the wealthiest classes, have hitherto been transported felons. They are well fed, well clothed, and receive wages from £10 to £15 a year, and are as well treated in respectable families, as similar descriptions of servants are in this country. In many instances, masters have even carried to an illegal extent their indulgences to their convict servants.

"Convicts who are mechanics are as well, if not better, treated than those who are domestic servants; for as every kind of skilled labour is very scarce in New South Wales, a convict who has been a blacksmith, carpenter, mason, cooper, wheelwright, or gardener, is a most valuable servant, worth three or four ordinary convicts; he is eagerly sought after, and great interest is made to obtain him. As a mechanic can scarcely be compelled by punishment to exert his skill, it is for the interest of the master to conciliate his convict mechanic in order to induce him to work well; in too many cases this is effected by granting to the skilled convict various indulgences; by paying him wages; by allotting to him task-work, and by permitting him, after the performance of the task, to work on his own account; and, lastly, by conniving at, or overlooking, disorderly conduct; for the most skillful mechanics are generally the worst behaved, and most drunken.

"The condition, however, of by far the most numerous class of convicts, those who are employed as shepherds or neatherds (of whom in 1837 there were above 8,000 in New South Wales), and in agriculture generally, is undoubtedly inferior to that of a convict who is either a domestic servant or a mechanic; they are, however, according to most of the witnesses, better fed than the generality of agricultural labourers in this country; most masters either pay them wages in money, or give them, instead of money, tea, sugar, tobacco, spirits, and other trifling indulgences.

"On the whole, therefore, your committee may assert that, in the families of well-conducted and respectable settlers, the condition of assigned convicts is much the same as the condition of similar descriptions of servants in this country; but this is by no means the case in the establishments of all settlers. As the lot of a slave depends upon the character of his master, so the condition of a convict depends upon the temper and disposition of the settler to whom he is assigned."

The act 5 Geo. IV., c. 84, gave the governor of a penal colony a property in the services of a transported offender for the period of his sentence, and authorized him to assign over such offender to any other person. There was a further power given to the governor by the act 30 Geo. III., c. 47, who, in the name of his Majesty, was authorized to remit absolutely or conditionally, the whole of the sentences of convicts; and the 9 Geo. IV., c. 83, empowered the governor to grant a temporary or partial remission of sentence; this power was limited by acts 2 & 3 Wm. IV., c. 62.

By the system in force in New South Wales "tickets of leave," which enabled a convict to live free, and work on his own account, within a prescribed district, (binding him to appear on Sundays before a magistrate), were granted to a seven-year convict, at the expiration of four years; for fourteen years at the end of six years; and for life at the end of eight years, unless his conduct during these periods had been very bad. These tickets of leave were liable to be cancelled, if the holder committed any offence for which he was punishable by a magistrate; and the effects of the system are thus recorded in the report of the committee of the House of Commons in 1838, p. xvii. :—

"This indulgence on the whole has a very useful effect, as it holds out hope to a convict if he behave well, and is liable to be reassumed in case of misconduct. Ticket-of-leave men find no difficulty in obtaining work at high wages; and having acquired experience in the colony, they are frequently preferred to lately-arrived emigrants. They fill many situations of trust in both colonies; such, for instance, as constables in the police, overseers of road-parties and chain-gangs; the better educated have been employed as superintendents of estates, as clerks to bankers, to lawyers and to shopkeepers, and even as tutors in private families; some have married free women, are in prosperous circumstances, and have even become

wealthy; and the real editor of one of the leading journals in the colony of New South Wales was a ticket-of-leave convict."

Many of the "ticket-of-leave" men, or those who obtained conditional or local pardons for long-continued good conduct, or for useful services, acquired large fortunes; one, named Sam Terry, possessed, it is said, an income of £40,000 a year; I rode over a large estate belonging to him on the beautiful banks of the Nepean river, the greater part of which was under cultivation, growing wheat, barley, oats, maize, clover, peas, beans, and other valuable products: it had also extensive herds of fine cattle and flocks of sheep: but the habitation of the owner of this vast property—with wealth then estimated at a quarter of a million sterling—was mean in the extreme. He could not, I believe, either read or write, but he had nevertheless a quickness of apprehension and a readiness in detecting errors in the accounts of his overseers which was so remarkable, that, as was said of Hyder Ali (the father of Tippoo Sultan) who also could neither read nor write, no man attempted to deceive him.

This and other instances becoming known, transportation to "Botany Bay" was deemed a very trifling punishment. The evidence laid before the House of Commons in 1837-8 proved the reverse, and the committee thus condense that evidence:—

"Your committee consider, that in the preceding pages they have fully established the fact, that transportation is not a simple punishment, but rather a series of punishments, embracing every degree of human suffering, from the lowest, consisting of a slight restraint upon the freedom of action, to the highest, consisting of long and tedious torture; and that the average amount of pain inflicted upon offenders, in consequence of a sentence of transportation, is very considerable. The most important question, however, as to the efficacy of transportation as a punishment, is not with regard to the actual amount of pain inflicted, but the amount which those who are likely to commit crime, believe to be inflicted. It is proved, beyond a doubt, by the testimony of every witness best acquainted with the actual condition of convicts, and likewise by numerous facts stated in the evidence, that most persons in this country, whether belonging to the criminal population, or connected with the administration of justice, are ignorant of the real amount of suffering inflicted upon a transported felon, and underrate the severity of the punishment of transportation. Nor is this to be wondered at, when it is considered, that the penal colonies are 16,000 miles distant, and that the ignorant mass of the criminal population of this country are often misled by their evil passions to underrate the consequences of their evil deeds. On their arrival at the antipodes, they discover that they have been grievously deceived by the accounts transmitted to them, and that their condition is a far more painful one than they expected. For those convicts

who write to their friends an account of their own fate, are generally persons who have been fortunate in the lottery of punishment, and truly describe their lot in flattering terms; those, on the other hand, who really experience the evils of transportation, and are haunted with 'a continual sense of degradation,' are seldom inclined to narrate their sufferings except when they have powerful friends from whom they may expect assistance. Numerous instances, likewise, were mentioned of convicts, who, degraded and demoralized by their punishment, have, from feelings of anger and revenge, indulged in the malicious satisfaction of denying the efficacy of the law, and of braving those who had brought them to condemnation, by describing as pleasures the tortures they were enduring; by affecting indifference for a punishment, which other criminals were actually committing murder and seeking death in order to avoid. Thus it is proved by the most irrefragable testimony, that both those who are prosperous and those who are miserable, the drawers of prizes and the drawers of blanks in this strange lottery, influenced perhaps by that desire, common to human nature, of having companions and partakers whether of misery or of happiness, concur in tempting their friends in this country, by the most alluring descriptions, to come out and join them; thereby tending to diminish the little apprehension, if any, which is entertained by the lower orders for the punishment of transportation.

"Transportation, though chiefly dreaded as exile, undoubtedly is much more than exile; it is slavery as well; and the condition of the convict slave is frequently a very miserable one; but that condition is unknown, and cannot be made known: for the physical condition of a convict is generally better than that of an agricultural labourer; the former is, in most cases, better fed and better clothed than the latter; it is the restraint on freedom of action, the degradation of slavery, and the other moral evils, which chiefly constitute the pains of transportation, and of which no description can convey an adequate idea to that class in whom transportation ought to inspire terror."

A magistrate, generally himself a master of convicts, was authorized to inflict fifty lashes on a convict for "drunkenness, disobedience of orders, neglect of work, absconding, abusive language to his master or overseer, or any other disorderly or dishonest conduct." For these offences the convict might likewise be punished by imprisonment, solitary confinement, and labour in irons on the roads. In 1835, the number of convicts in the colony did not exceed 28,000; the number of summary convictions for the year was 22,000; in one month, in 1833, the convicts flogged numbered 247, and the lashes administered were 9,874, which would give, for the year, 2,964 floggings, and 108,000 lashes inflicted. The report of 1838 is filled with horrible details of crimes and punishments, equally at variance with the general character of Englishmen.

The fearful extent to which corporal punishment was carried is shewn in the following numerical return of flagellations

at Macquarie Harbour, for the years 1822, '23, '24, '25, and '26:—

In the Years	Number of Prisoners sentenced.	Total Lashes sentenced.	Lashes remitted.	Total Lashes inflicted.
1822	169	7,000	863	6,137
1823	229	9,925	825	9,100
1824	153	6,850	141	6,709
1825	112	5,211	494	4,716
1826	172	7,324	1,263	6,061
Total	835	36,310	3,586	32,723

Note.—Settlement formed 3rd January, 1822, 70 male prisoners; 31st December, 1822, 181 prisoners at the settlement.—31st December, 1823, 223 prisoners at the settlement.—31st December, 1824, 262 prisoners at the settlement.—31st December, 1825, 259 prisoners at the settlement.—31st December, 1826, 295 prisoners at the settlement.

Thirty-two thousand, seven hundred and twenty-three lashes inflicted in five years! On an average, nearly forty lashes to each of the prisoners; and, be it remembered, with a "cat-o'-nine-tails," with nine knots on each tail, and of a heavier weight than any "cat" used in the army or navy.

The extreme severities exercised at Norfolk Island—the penal dependency of New South Wales, were fearful, and the transportation committee of 1837–38, reported the evil effects of such a system in language which cannot be transferred to these pages. The committee add, that at the penal settlements of Van Diemen's Island, the severity of the system pursued is as great, if not greater, than that at Norfolk Island, and the culprits equally reckless, if not even more so—committing murder (to use the words of sir George Arthur), "in order to enjoy the excitement of being sent up to Hobart Town for trial, though aware that, in the ordinary course, they must be executed within a fortnight after arrival." At one of these settlements, named Macquarie Harbour, (now abandoned) 116 convicts absconded, between 3rd January, 1822, and 16th May, 1827; of these, seventy-six are supposed to have perished in the woods: one was hanged for murdering and eating his companion; two were shot by the military; eight are known to have been murdered, and six eaten by their companions; twenty-four escaped to the settled districts, thirteen of whom were hanged for bush-ranging, and two for murder—total, 101 out of 116.

Perhaps no better illustration could be given of the manner in which the local government of New South Wales viewed the sabbath, more than half a century after the

foundation of the colony, than is contained in the evidence before the House of Commons' committee of February, 1838, of the very reverend William Ullathorne, (p. 21), who says—

“I visited a chain-gang, near Paramatta, on a Sunday, for the purpose of administering religious consolation, and when I came to the gang I found a series of boxes, and when the men were turned out, I was astonished to find the numbers that were turned out of each of those boxes; I could not have supposed that those boxes could have held such a number. I found that they were locked up there during the whole of the Sunday; likewise during the whole of the time from sunset to sunrise. On looking into those boxes, I found that there was a ledge on each side, and that the men were piled upon the ledges, and others below on the floor; and I believe from the bringing together of such numbers of men, heated as they are and excited, the consequences are of a very immoral kind. As I left the colony, I put a question to a clergyman, who has had much experience there, as to the space allowed to each convict in those boxes; the answer given was, that the average was about eighteen inches each man, but that they varied considerably. Eighteen inches square?—Yes; there are two shelves, so that some are piled above, and some below. He stated to me at the same time, that in the hulks he believed it was not more than sixteen inches, and that they were so closely piled, some ten or fourteen being put in a small cell, that they had not room to lie on their backs, and were obliged to lie sidewise. You have stated to the committee the condition of the male convicts; what is the condition and conduct of the female convicts?—The conduct of the females is very bad indeed; indeed they are, I should say, more irreformable than the male convicts; when a woman is bad, she is generally very bad.”

By this herding together of criminals, the best were brought down to a level with the worst in disposition and corruption, and the finishing stroke was thereby given to the terrible system of severity only too frequently practised. Local magistrates being empowered to scourge the criminals at will; a look, a word, caused the scourge to be immediately administered to the unhappy offender—who sought his revenge in the murder of his master or the overseer—in the burning of his house and farm-stacks, and in the poisoning of the cattle; or the delinquent fled to the wild districts, became a bushranger, and was soon captured, and executed on the scaffold.

I saw and conversed with ten criminals in their condemned cells, on the eve of their execution. They had never heard the word of God preached since the period of their childhood, some not even then; they had never entered a church or chapel in the colony, or attended a sabbath service; and they had fled to the bush because their backs

had been repeatedly bared to the bone by constant scourgings. Having witnessed, while serving in the army and in the navy, the disastrous effects of subjecting men to the degrading torture inflicted on brutes, I bear my humble testimony in support of the evidence adduced before the transportation committee, that this species of punishment has had a most disastrous effect.

One passage in the parliamentary evidence deserves record on this important subject: the witness (who had great experience on the subject) was asked the relative value of the mild or the coercive system. He replied,

“I believe that a system of coercion will never reform men; it may restrain them, from fear, so long as the coercion is suspended immediately over them, but I do not think that it can be at all productive of reform; I always find that where there is severe coercion the pride of man rises up against that coercion, and that he hardens himself, and that it is generally his boast among those with whom he is associated, that he can endure as long as his master can inflict. I do not think that the result of a severer system of coercion has been followed by a greater amount of reformation; and I think if the number of prisoners at present in Van Diemen's Land undergoing punishment for new crimes in that country be inquired into, it will be found that the result has not been to reform men. I find that in the year 1835 the number of male convicts in Van Diemen's Land was 15,724; of this number I found that 3,947 were undergoing punishment at that time for new crimes in the colony, that is to say, about one-fourth; whilst I find at the same period that 2,462 enjoyed the indulgence of tickets of leave; they are somewhat less than one-sixth. Of females, I find, in 1835, that there were 2,195, and of those 408 were in the house of correction, that is to say, one-fifth; and that only 192, or one-tenth, had the indulgence of tickets of leave. I think, when it is considered how long that system has been in operation, if the result had been to reform, the first effects which would naturally result, viz. the greater number that would be under punishment, ought to have passed away, and that there ought to have been found very few comparatively under punishment; but if the number under punishment in Van Diemen's Land is compared to the number under punishment in New South Wales, I believe it will be found that the relative punishment is much greater in Van Diemen's Land than in New South Wales. It might be said that the greater number under punishment is only in consequence of the system that a greater number of criminals are brought to punishment, and a smaller number escape; this certainly would be the case in the beginning of the system, but after the system had wrought for some years, if it had created reformation, there ought to have been a much less number under punishment. I would remark, likewise, with respect to the system of severity, that it tends in another way to induce bad conduct; when a prisoner finds himself so severely treated by his master, he will always be apt to imagine that in another situation he will be much less severely treated; he will consequently be induced to behave particularly ill, in order to be returned to the government. I believe it has been stated in the instructions to overseers of chain-gangs in Van Diemen's Land, that

the prisoners are to be considered by them as under a sort of mental delirium; that they see all things through a false medium; in such a case, I should suppose that the prisoners who are under a severe system of coercion, would imagine that their condition could not possibly be worse, and the consequence would be that they would be induced to behave very ill, for the purpose of being removed from the service of their masters. I believe it has been found by experience that severe coercion has been productive of crimes of great magnitude; the quantity of bushrangers in Van Diemen's Land was at one time very great, and the number of executions was at one time extraordinarily great; and I found crimes existing in Van Diemen's Land resulting indirectly from that severe system, of which I have known no cases in New South Wales; there have been cases where prisoners have been so coerced in Van Diemen's Land that they have been determined at any cost whatever to release themselves from it; they have broken from their confinement, and after plundering the cottages and making to the woods, finding that they could not dare to appear again, they have had recourse to cannibalism for subsistence. I remember one particular case, which produced a great impression, when that coercive system was at its height at Macquarie Harbour, eleven men broke away, and finding that the police were in chase after them, they retired into the bush."

To the credit of the colonists, be it said, that they lost no time in earnestly appealing to the imperial government, as soon as the urgency of the matter was comprehended. A petition was transmitted to the House of Commons, in 1836, from six members of the Legislative Council, fifty-seven justices of the peace, four clergymen, five solicitors, 355 landholders, merchants, and other colonists, in which the petitioners stated, that although the colony presented an aspect of extraordinary and unexampled prosperity, the best interests of the community were threatened with serious danger, by the fearful increase of crime which had, of late years, taken place in the colony. The petitioners considered that the existing colonial law for the regulation of juries, by admitting persons to sit as jurors who had undergone punishment for crime, and were of bad repute, did not guard the administration of justice from sinister and contaminating influence, and that its natural effect was to encourage crime. New South Wales had not then an elective House of Assembly, and its Legislative Council, until 1842, was wholly nominated by the Crown; the colonists, therefore, were almost entirely dependent on the authorities in England for the regulation of their internal affairs, and consequently various other local grievances were laid before the House of Commons in their petition; themselves, however, taking the initiative in supplying their spiritual wants.

DIV. I.

In 1836, an act was unanimously passed by the Legislative Council of New South Wales, to promote the building of churches and chapels, and to provide for the maintenance of religion in the colony; and, in the language of the governor, Sir Richard Bourke, to Lord Glenelg, his Majesty's secretary for the colonies, 14th September, 1836, "the measure met with the sincere and grateful acquiescence of all classes of the community." By this act, whenever a sum of not less than £300 was raised by private contribution, and applied towards the building of a church or chapel, and a dwelling for the minister attached, the governor and council were authorized to issue a sum equal to that subscribed toward the church or chapel, and the building for the resident minister. The governor and council were also empowered to grant unto duly appointed ministers, salaries varying from £100 per annum for 100 adults, to £150 and £200 per annum for a resident population of 150 or 200 adults. There are other favourable provisions in the enactment which was applicable to the church of England, church of Scotland, and church of Rome. The colonists also provided for the passage, from the United Kingdom to Australia, of ministers of the gospel of the three denominations named, at the rate of £100 for single men, and £150 for those who were married, and twelve clergymen of the established church were immediately sent to New South Wales, under the recommendation of the Society for the Propagation of the Gospel; twelve presbyterian ministers, under the recommendation of the General Assembly of the church of Scotland, and of the Synod of Ulster; and seven ministers of the church of Rome, recommended by the authorities of their church, were also sent out by government in 1837, conformable to the local enactment in New South Wales in 1836. Three German missionaries of the Lutheran church were also, in 1837, sent to New South Wales, at the expense of the colonists, who were to be employed in a mission for the religious instruction of the aborigines.

In order to carry out a general system of gratuitous education for the poorer classes of the community, the colonists, in June, 1837, defrayed the expenses of obtaining from England well-qualified and respectable schoolmasters and mistresses, to whom an allowance of £100 to £150 was granted; and a salary of £150 a-year for a master,

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£100 for his wife, and a small dwelling-house was allowed. Under these provisions, his Majesty's government sent out, in 1837, sixteen teachers, carefully selected by the "Glasgow Educational Society." Six male, and four female teachers were sent by her Majesty's government, for the education of poor Roman catholics, under the recommendation of the Rev. W. Ullathorne; and, from time to time, many ministers of the gospel and teachers have proceeded to New South Wales, whose expenses have been defrayed from the local revenue.

In July, 1838, the evidence delivered before the transportation committee of the House of Commons, during the session of 1837, reached New South Wales, and produced "very considerable sensation;" and a petition, signed by "sixty-seven magistrates, and above 500 individuals of great respectability," was immediately presented to the governor, praying the appointment of a committee of the Legislative Council, to inquire into the working of the system of transportation and assignment, with a view to counteract, as far as possible, the evil impressions which might have been produced in England in respect to the social and moral condition of the colony. The Legislative Council, after protracted debates, negatived the prayer of the petition, from an apprehension that such an enquiry would tend to revive animosities in the colony which had happily, in a great degree, subsided; but the Council expressed its opinions by a series of resolutions, to be laid before both houses of the Imperial Legislature; and for this purpose they were transmitted, with the entire approbation of the governor, to her Majesty's secretary of state in the colonial department. It is an act of simple justice to place on record a declaration so highly creditable to the colony.

"Resolved—That in the opinion of this council, the numerous free emigrants of character and capital, including many officers of the army and navy, and East India Company's service, who have settled in the colony with their families, together with a rising generation of native-born subjects, constitute a body of colonists, who, *in the exercise of the social and moral relations of life, are not inferior to the inhabitants of any other dependency of the British crown, and are sufficient to impress a character of respectability upon the colony at large.*

"5. Resolved—That the rapid and increasing advance of this colony, in the short space of fifty years from its first establishment, in rural, commercial, and financial prosperity, proves indisputably the activity, the enterprise, and industry of the colonists, and is wholly incompatible with the state of society represented to exist here.

"6. Resolved—That the strong desire manifested by the colonists generally to obtain moral and religious instruction, and the liberal contributions which have been made from private funds towards this most essential object, abundantly testify that the advancement of virtue and religion amongst them is regarded with becoming solicitude.

"7. Resolved—That if transportation and assignment have hitherto failed to produce all the good effects anticipated by their projectors, such failure may be traced to circumstances, many of which are no longer in existence, whilst others are in rapid progress of amendment. Amongst the most prominent causes of failure may be adduced the *absence, at the first establishment of the colony, of adequate religious and moral instruction*, and the want of proper means of classification in the several gaols throughout the colony, as well as of a sufficient number of free emigrants properly qualified to become the assignees of convicts, and to be entrusted with their management and control.

"8. Resolved—That the great extension which has latterly been afforded of *moral and religious instruction*, the classification which may in future be made in the numerous gaols now in progress of erection, upon the most approved principles of inspection and separation, the more effectual punishment and classification of offenders in ironed gangs, according to their improved system of management, the numerous free emigrants now eligible as the assignees of convicts, and the accumulated experience of half a century, form a combination of circumstances which renders the colony better adapted, at the present, than at any former period, to carry into effect the praiseworthy intentions of the first founders of the system of transportation and assignment, which had no less for its object reformation of character, than a just infliction of punishment.

"9. Resolved—That in the opinion of this council, no system of penal discipline or secondary punishment will be found at once so cheap, so effective, and so reformatory, as that of well-regulated assignment, the good conduct of the convict, and his continuance at labour being so obviously the interest of the assignee, whilst the partial solitude and privations incidental to a pastoral or agricultural life in the remote districts of the colony, (which may be made the universal employment of convicts), by effectually breaking a connexion with companions and habits of vice, is better calculated than any other system to produce moral reformation, *when accompanied by adequate religious instruction.*

"10. Resolved—That in the opinion of this council, many men who, previously to their conviction, had been brought up in habits of idleness and vice, have acquired, by means of assignment, not only habits of industry and labour, but the knowledge of a remunerative employment, which, on becoming free, forms a strong inducement to continue in an honest course of life."

The details respecting the ecclesiastical establishment, schools, and state of crime, which will be found in a subsequent chapter, prove the correctness of the assertions contained in the above resolutions of the Legislative Council. New South Wales is now as little tainted with vice or crime as any other colony of the British crown.

At the commencement of 1839, the clergy-

men doing parochial duty in the colony under the jurisdiction of the Bishop of Australia (who was nominated in 1835) amounted to thirty-three. The number of Presbyterian clergymen was twenty-three; and of Roman catholic clergymen (including a bishop, nominated in 1835) borne upon the ecclesiastical establishment, was twenty. The number of missionaries attached to the Wesleyan mission was six; of baptist pastors five; and there was besides one "independent" minister. There were also several missionaries specially employed among the Aborigines. This affords a gratifying contrast to the state of the colony a few years previous. The result of these meritorious exertions on the part of the colonists, who bore the whole of the expense, was a rapid diminution of crime, and a marked improvement in the religious demeanour and social condition of the whole population.

In 1840, an order in Council was issued respecting the transportation of convicts, which recorded that by an act passed in the fifth year of the reign of king George the Fourth, his Majesty was empowered, by and with the advice of his privy council, from time to time to appoint any place beyond the seas, either within or without his Majesty's dominions, to which felons under sentence of transportation should be conveyed. In pursuance of the powers of this act, "New South Wales, Van Diemen's Land, and all islands adjacent thereto," were, on the 23rd June, 1824, appointed to be the places to which felons and others under sentence of transportation were to be conveyed. By the above-named order in Council, it was decreed that from and after the 1st August, 1840, "Van Diemen's Land, Norfolk Island, and the islands adjacent to, and comprised within, the government of Van Diemen's Land," should in future be the places to which felons and other offenders in the United Kingdom be conveyed, under sentence or order of transportation. From that date transportation to New South Wales ceased.

In August, 1838, the select committee of the House of Commons on transportation, recommended that "transportation to New South Wales, and to the settled districts of Van Diemen's island, should be discontinued as soon as practicable." The early adoption of this recommendation became essential to the well-being of the colony, from the large and increasing influx of convicts compared with the free immigrants. It will be seen by the accompanying table, that during the ten years ending 1834, the

number of convicts transported to New South Wales was 28,983, while the emigrants from this country were only 7,585.

Comparative Statement of the Number of Convicts arrived in New South Wales from 1825 to 1834, and of Free Emigrants from 1829 to 1834.

Year.	English.		Irish.		Tot.	Free Emigrants.			
	Male.	Fem.	Male.	Fem.		Male.	Fem.	Chil.	Total
1825	764	140	901	111	1916	—	—	—	—
1826	679	—	1036	100	1815	—	—	—	—
1827	1239	342	846	160	2587	—	—	—	—
1828	1589	179	752	192	2712	—	—	—	—
1829	2008	319	1163	174	3664	306	113	14	564
1830	2096	128	685	316	3225	166	70	73	309
1831	1437	206	692	298	2633	185	98	174	457
1832	1816	248	928	133	3119	819	706	481	2006
1833	2719	377	794	261	4151	838	1146	701	2885
1834	1923	284	781	173	3161	571	596	397	1564
Total	16264	2223	8578	1918	28983	2385	2729	1971	7585

THE GRANT AND SALE OF CROWN LANDS is intimately connected with the past and present state of New South Wales, and the subject has occupied the attention of statesmen in England for twenty years, not merely as regards the amount of local revenue derivable from the sale of those lands, but as a means for the proportionate adjustment of land, labour, and capital, which, wisely used, may enable the government efficiently to promote emigration from the United Kingdom to those colonies in the temperate zone where British subjects can labour as at home, and obtain for that labour a more ample reward than could reasonably be expected in the crowded condition of the labour market in England. It may be necessary to premise, that there is little difference of opinion as to the injurious effects of granting large blocks of land to a few individuals; most persons agree in the advisability of the crown lands being sold in small sections, and put up for auction at a fixed minimum price. The collision of opinion has reference chiefly to what that fixed minimum price should be in the several colonies, or in the same colony in different stages of its progress.

In the *History of the Colonies* (vol. iv.), published in 1835, and in the *Colonial Magazine*, I stated my regret at being unable to agree with the founders of the colony of South Australia, in their resolve to obtain the assent of her Majesty's government to fix a *minimum* price of 12s. per acre on all public lands offered for sale by auction; and, among other grounds, I differed with them, 1st.—"By reason of the nature of the soil in Australia, it being extremely difficult to find good land in large continuous tracts; a rich fertile black mould of a few hundred

acres will sometimes be found suddenly interrupted by several thousand acres of a sandy scrubby ridge, far worse than Hampstead Heath." 2nd.—"A farmer could not afford 12s. per acre for the purchase of land, when 300 sheep would require upwards of 1,000 acres for pasturage." 3rd.—"The principle of concentration which it was sought to establish, by causing all land taken up to be cultivated, might be established, if the whole of Australia were like the fertile deltas of the Ganges or Nile; but that such was not the case, and Australia was better adapted for a pastoral than an agricultural country." 4th.—"Too high a price for land would check emigration." 5th.—"That the settlers would, of necessity, spread themselves over the distant unoccupied lands with their flocks and herds—no government could control their proceedings—and an excessive dispersion of population, instead of concentration, would be the result." How far this opinion has been verified, will be seen from the following abstract of the proceedings connected with the "land question" in New South Wales since the foundation of that settlement.

In 1790 (13th February), captain Phillip, then governor of New South Wales, in a letter to lord Sydney, recommended that grants of land, consisting of 500 to 1,000 acres, should be given to such settlers as his Majesty's government might send out to the colony; and, as the labour of clearing the ground of timber was very great, that each settler should have the services of twenty convicts allowed him, who should be supported for two years from the public stores. The inducements held out to officers and soldiers to become settlers, by grants of land, was strongly seconded by every possible encouragement to turn farmers, in order to render the settlement independent of any foreign aid for the supply of the necessaries of life. For this end land was freely granted, though not in large sections, to all classes, free or bond, in or out of the public service, who appeared capable of cultivating it; and convicts who thus exerted themselves received their freedom and a farm, as their reward.

The civil and military officers obtained large tracts; but in 1818 an order was issued to the governor of New South Wales to discontinue the practice of giving land to public officers whilst in the service; this regulation was afterwards relaxed, and public officers were placed on the same footing as settlers, in this respect, which appears to have been strongly advisable, otherwise, the greater

part of the landed property of the colony would have been vested in the hands of emancipated convicts and their descendants, to the exclusion of the educated and higher classes of colonial society. Most of the civil and military officers invested their savings in land; many retired from the service of the crown, and became extensive farmers and graziers, and some of the finest estates in New South Wales, which, both in the style of the mansions and the improvement of the land, would be an honour to any county in England, belong to the families of the civil, military, and naval officers who, in the early and suffering days of the colony, made it their home.

Up to the year 1823, the governor of New South Wales and Van Diemen's Island had the power of granting land to free settlers, and (as a reward to good behaviour) to convicts. When a convict was pardoned, the governor gave, to each male, a grant of twenty acres; if married, twenty more; and to each child in the settlement, ten acres, free from all charge for ten years; after which, a quit-rent of sixpence for thirty acres was levied. To each free settler the governor could make grants of land to the same extent as to convicts, and grant them 100 acres additional. The governor might make larger grants to both convicts and free settlers; but, for such grants, it was necessary to obtain the special approval of the secretary of state. Not unfrequently, also, rations were allowed, from the public stores, to free settlers as well as to the emancipists, until they could raise sufficient food from the soil. The power vested in the governor was extensively exercised. Up to the year 1810, the successive governors of New South Wales had given to individuals, principally to settlers who had been convicts, 177,500 acres, in grants seldom exceeding 100 acres; and it must be acknowledged, that the colony was largely indebted to this class for the production of an annually-increasing quantity of food, which rendered the inhabitants independent of foreign supplies. I visited many of the small farmers in the districts between the Hawkesbury river and Sydney, who had been pardoned by the several governors of New South Wales, or who, on completing their allotted period of servitude, had received free grants of land under 100 acres. In almost every instance I found industry, frugality, and order; in many, a deep regret for the sins of their youth, and an earnest desire that their chil-

dren should be trained in the path of religion. The forest was being gradually cleared around the log-huts; in various places the comfortable brick tenement had been raised, and the neat garden paled, while the full haggard and the lowing kine gave indications of a comfortable homestead. The free grant of these small tracts of land has been the means, under Providence, of permanently reclaiming many a sinner from the errors of his ways: a piece of land—although covered with a dense forest—which he could call his own, converted him from an avowed enemy of society, into one of its most strenuous defenders; he found, by experience, that honesty was the best policy; and his children learnt, from the lips of their parents, to revere the laws and institutions of the country whose wise and merciful policy produced such beneficial results.

There can be no doubt that land was too freely granted in New South Wales. Up to the year 1823, persons emigrating from England took with them letters from the secretary of state to the governor, directing land to be granted to the intending settler according to his means. Governor Macquarie fixed 2,000 acres as the maximum of grants, unless the secretary of state directed a larger quantity to be given. A number of grants were made of 10,000 to 20,000 acres. Mr. Potter Macqueen, then M.P., received a grant of 10,000 acres, and a reserve of 10,000; Mr. Hart Davis, then M.P., and Mr. H. Davis, jun., 15,000 each; Sir Thomas Brisbane, the marquis of Sligo, and Mr. J. Browne, 10,000 acres each, with reserves of 10,000 more each. (See Parliamentary Committee evidence, 11th July, 1836.) *No condition of residence was attached to these grants.*

In 1824 (1st October), an association, termed the Australian Agricultural Company, received a free grant of *one million acres*, on the following conditions:—After five years, a quit-rent of $1\frac{1}{2}$ per cent. on the land, to be valued at 1s. 6d. per acre—payments every five years; power to redeem, on payment of twenty times the value of the quit-rent to be redeemed; to employ a number of convicts equal to the number of free labourers; one free superintendent to every fifty convicts; no land to be alienated for five years; quit-rent to be redeemed by the employment of a certain number of convicts; and the whole amount of quit-rent to be redeemed, if, within twenty years from the date of grant, it shall appear that the com-

pany have relieved the treasury from a charge equal to £100,000, to be calculated at the rate of £20 for each convict supported during a year.

From 1810 to 1822, during the administration of governor Macquarie, 400,000 acres were granted to free settlers and emancipists. From 1822 to 1831, when the plan of public sale was systematically introduced, the number of acres granted was about 3,386,250. Up to the 31st December, 1834, the total number granted in the colony was 4,163,353 acres. The conditions attached to these grants were various. According to the evidence of Mr. H. S. Kelsey, of the colonial office, before the House of Commons' committee of 1836, lands granted previous to November, 1823, were liable, at the end of ten years, to a quit-rent of 2s for every 100 acres between November, 1823, and May, 1825; at the end of five years to a quit-rent of 15s. for every 100 acres; and also, during the latter period, lands sold were liable to a quit-rent of 2s. for every 100 acres; lands granted since May, 1825, were liable, at the end of seven years, to a quit-rent of 16s. 8d. per 100 acres. Very little attention, however, was paid to the collection of the quit-rents. When in the colonial secretary's office in New South Wales, I strongly urged the yearly collection of these accumulating sums. In 1832, the amount due for quit-rents was estimated at £16,552; in 1846, at £69,000. In some cases, twenty-five years' quit-rent were due; in others, the arrears amounted to more than the value of the land.

In 1824 regulations for grants of land in New South Wales and Van Diemen's Land were issued by her Majesty's government, which announced that New South Wales and Van Diemen's Island were to be divided into counties, hundreds, and parishes, each parish to comprise an area of about twenty-five miles. A valuation to be made of all the lands in the colony, and an average price to be struck for each parish. All lands in the colony not hitherto granted to be put up for sale at a price to be fixed by the said commissioners; the largest quantity to be sold to one individual, 9,600 acres; the lots to be put up for sale in quantities of three square miles—1,920 acres. Any purchaser who, within ten years after his purchase, should, by the employment and maintenance of convicts, have relieved the public from a charge equal to ten times the amount of the purchase money, would have the pur-

chase money returned, but without interest. The saving to the public on each convict was estimated as equivalent to £16 per annum.

No grants to be made without purchase, unless the governor were satisfied that the grantee had both the power and the intention of expending in the cultivation of the land a capital equal to half the estimated value of it, within seven years. The largest grant, without purchase, to be 2,560 acres; the smallest, 320 acres. A quit-rent of five per cent. per acre upon the estimated value to be fixed upon the land granted without purchase. A nominal quit-rent of a peppercorn to be made for lands purchased in fee-simple. Quit-rents not to be payable on grants for seven years; and in the redemption of the quit-rent at twenty years' purchase, the grantee to have credit for one-fifth part of the sum he might have saved to his Majesty's government, by the employment and maintenance of convicts.

In April, 1827, further instructions were issued from the office of the secretary of state for the colonies, in Downing Street, respecting the terms upon which land would be granted in New South Wales and Van Diemen's Island. Those terms corresponded with the foregoing, and it was stated, that persons who had obtained leave to become purchasers were to send in sealed tenders for the land advertised to be sold, and the highest bidder, if approved by the governor, to become the proprietor. One-fourth of the value of the land, estimated at the time of the grant, to be expended in the cultivation and improvement of the land, within seven years, under penalty of forfeiture. The amount of capital which was to be a criterion of the quantity of land to be granted, was £500 for a square mile—640 acres.

In 1828, Mr. Huskisson, then secretary of state for the colonies, laid before the Duke of Wellington, then first lord of the treasury, a proposition for the establishment of a metropolitan Colonial Land Board; the Duke assented, on condition that the board did not involve the revenues of the British exchequer in additional expense; to which Mr. Huskisson replied, that it would, on the contrary, create an additional source of revenue. Mr. Huskisson evidently had in view the system which had been for some years successfully adopted in the United States, of selling the public lands at a moderate fixed price per acre; formerly, the American government put up their land at two dollars per acre; in 1820 the upset price

was fixed at one dollar and twenty-five cents per acre; it is now, I believe, only one dollar, equal to fifty pence, per acre. The late Sir Wilmot Horton looked to the sale of the crown lands in the colonies as a means of raising a fund to promote emigration.

In 1831 instructions were issued under the royal sign manual (see p. 3, sess. paper of 1831, No. 328), directing, that for the future, land should be put up for auction at a minimum upset price of 5s. per acre. These regulations came into operation in the middle of the year 1831. Under them, the system of reserving land for ecclesiastical purposes was abolished, and the church and school corporation of New South Wales (which, in 1829, received 419,199 acres,) was dissolved. Simultaneously with the raising the price of land to 5s. per acre, all unoccupied lands within the prescribed limits were authorized to be let on lease, in conformity with the following instructions:—

“All crown lands within the prescribed limits will, if applied for, be let by auction, in lots of one square mile, or 640 acres each, as nearly as practicable. Persons desirous of renting such lands, will address themselves to the surveyor-general, taking care to describe accurately the situation of each section applied for. The lands so applied for will be advertised for one month, and the lease of each lot for one year will then be put up to public auction. No lot consisting of less than one square mile, or 640 acres, will be let, except in special cases, which may render expedient a departure from this rule. Each lot will be put up at a rent of 20s. a-year, and the highest bidding (not less than that sum) will be accepted. It is to be distinctly understood that the lands so let will be open for purchase; and in the event of their being sold, must be surrendered by the lessee upon one month's notice.”

It was proposed during this year, by lord Howick (now earl Grey), then under secretary of state for the colonies, to apply the net revenue arising from the sale of lands in New South Wales in encouraging female emigration; and during the years 1832—35 there were sent to New South Wales and Van Diemen's Island 2,972 female emigrants, at a cost of £42,070.

During the years 1832, '3, '4, and '5, the colonies began to form a prominent subject of public discussion; political agitation in England, distress in Ireland, and the rapid increase of population, had turned the attention of thinking men to providing a permanent safety valve for the state by a system of continuous emigration from the United Kingdom.

In 1836 (10th June), a select committee of the House of Commons was appointed to enquire into the method of disposing of

waste lands in the colonies; but it is apparent from the list of the committee, and the well known opinions of the witnesses examined, that the evidence to be elicited was such as would be calculated to support a foregone conclusion. None of the members of the committee, except Mr. Roebuck, had ever been in any colony; the principal witnesses were Mr. Edward Gibbon Wakefield, and colonel Torrens, who were then engaged in the laudable effort to found the colony of South Australia on self-supporting principles, but who I think erroneously endeavoured to support their policy by fixing a high price on land; the sums thus received to be employed in conveying labour to the colony. None of the witnesses examined had ever been in Australia; two (captain Wood and Mr. Bryan) had been in Van Diemen's island, —one (Mr. George Stephenson) had been in the United States, and one (Mr. Burnly) in Trinidad. In the report of the committee (dated 10th August, 1836) it is stated, that since the year 1795 the sales of waste lands in the United States had produced the sum of £12,439,049, and that all land is offered for sale by auction at an upset price fixed by the legislature; the committee, however, omitted to state in their report that the price seldom exceeded 5*s.* per acre. They recommended that the principle introduced by the Earl of Ripon's regulations of 1831, namely, that land should be disposed of by auction at a minimum upset price—should be affirmed by an act of the Legislature, in order to give this principle a character of permanency and stability which it did not then possess. But the committee abstained from stating what that minimum price should be, as it must vary according to the circumstances of each colony, and “can only be determined in any one by the test of experience.”

Mr. E. G. Wakefield proposed before this parliamentary committee that a “sufficient price” should be fixed on the colonial lands, but he declined stating what that sufficient price ought to be. Colonel Torrens, who, as chief commissioner of the South Australian association, has carried out some of Mr. Wakefield's views, gave his opinion of the “sufficient price” as at least 40*s.* an acre..

Mr. G. P. Scrope, M.P., in his valuable evidence before the committee (7th July, 1836), stated that supposing the theory of Mr. E. G. Wakefield to be correct, the practical adoption of the theory would be checked at a very early point for the following reasons:—1st, Emigration would be

checked to New South Wales by demanding a price for land much exceeding the terms on which land of equal fertility could be obtained in the United States. 2nd, That “a high price would prevent the colonists obtaining land: they would be driven to settle as squatters, and appropriate to themselves the occupation or use for a certain period of the land denied them to purchase, except at an extravagant rate.” The arguments of Mr. Scrope, and the facts by which they were supported, successfully combated the vague theories put forth by Mr. Wakefield and colonel Torrens. He (Mr. Scrope) entreated the committee to eschew Mr. Wakefield's “leading principle” of colonization as founded on a fallacy, and dangerous, if attempted to be carried into operation, to the very objects in view: he therefore urged them to “adhere in the question of price to the safe and successful example of the United States;”—adding, that he wished to see all the crown lands disposed of after the American system, at not less than a certain minimum price, and the entire proceeds of those sales to be appropriated to an immigration fund, to defray the gratuitous introduction of labourers from the mother country.

In 1836 (12th October), after the committee of the House of Commons had closed its labours, colonel Torrens, as chairman of the South Australian commissioners, addressed a letter to Lord Glenelg, his Majesty's secretary of state for the colonies, objecting to the price of 5*s.*, or any lesser sum, per acre for land in New South Wales and Port Phillip, while 12*s.* was the minimum price in South Australia, and urging that the labourers sent to South Australia would quit that colony for New South Wales if such an inequality in the price of land continued to exist in two adjoining colonies. Mr. (now Sir James) Stephen in an able reply to colonel Torrens, dated 27th October, 1836, stated on behalf of Lord Glenelg, that the persons who had embarked their property in South Australia knew perfectly well that 5*s.* per acre was the upset price in the immediately adjacent colonies; that on these terms (comparatively so low) the inducements to occupy large portions of land without licence had been found irresistible; that the “responsibility of the colonists rested with themselves, who must have been prepared for the competition of unauthorized occupants of the soil on the surface of that vast continent, and that it was a danger not concealed from the colonists at the very outset

of their enterprize." It is evident from this letter that Mr. Stephen foresaw the injurious effects attendant on an endeavour to fix a high price for land in New South Wales. He stated that—

"For some years past his Majesty's government have steadfastly enforced the rule, which forbids the alienation of wild lands in New Holland except by sales at a public auction at a fixed minimum price; but they have always perceived that circumstances beyond their control would fix that minimum at a lower point than that which would be selected, if the discretion of the government in this matter were absolutely free and unfettered. In the remoter part of the vast regions comprised within the range of the Australian colonies, the power of the law is unavoidably feeble when opposed by the predominant inclinations of any large body of the people; in such a country unpopular regulations, unless supported by a force either of police or soldiery, irresistible and overwhelming, must become little more than a dead letter.

"Thus, in New South Wales, the squatters (to employ the significant local term) find in the *high upset price of land some of those advantages which a smuggler in other countries derives from a high rate of duty*; their proceedings, instead of being condemned and opposed, are countenanced and supported by the society to which they belong, consequently an extensive territory, at a distance from the seat of government, has been occupied by unauthorised settlers of all classes, by the wealthy not less than by the poor; and, in this systematic violation of the law, each class finds support and encouragement in the example and common interest of its various members. With the most earnest desire to repress the growing evil, the local authorities have experienced the impossibility of making an effectual resistance to the general will."

Lord Glenelg, therefore, through the under secretary of state, Mr. Stephen, expressed his determination of not attempting to raise the price of land in New South Wales to the rate at which theorists wished it to be fixed at in South Australia; and stated that "even the fixed price of 5s. had afforded an irresistible temptation at Port Phillip to the unauthorised occupation of the soil; the governor (Sir R. Bourke) was consequently authorised to relax the rule of price at Port Phillip if he should find it indispensable to check the evil of the unlicensed occupation of the newly explored territory."

In 1837 (15th February) Lord Glenelg sent to Sir R. Bourke, then governor of New South Wales, the correspondence with colonel Torrens, and required a report how far the discretion of the local government had been exercised in fixing a higher rate than 5s. per acre as the upset price of lands supposed to be of peculiar value. Sir R. Bourke informed the secretary of state that in the first place the competition for land in the neighbourhood of Melbourne and Wil-

liams' Town, Port Phillip, had caused the waste lands to be sold at a price which would prevent any further cause for alarm in the South Australian commissioners. With regard to New South Wales, the government rightly considered that competition at public sale would always determine the real value of any allotments, and that the competition which was rapidly increasing would become more active as the colony advanced in wealth and population.

In support of his opinion the governor adduced the following table, showing the average price of crown lands sold in the colony of New South Wales, for the five years ending the 31st December, 1836:—

Year.	Town Allotments, per Perch.		Other Land, per Acre.	
	s.	d.	s.	d.
1832	2	10	6	0
1833	2	4	9	6
1834	6	2	6	8
1835	5	2	5	16
1836	4	2	6	2

The opinions of Sir Richard Bourke on this highly important subject, not only in reference to New South Wales, but to all colonies with waste lands, so clearly indicate the evils which have since ensued from a disregard of those arguments, urged with all the weight of local experience, and enforced by sound reasoning, that I am induced to give them at full length. In testimony of their practical value, Mr. Justice Therry, who had been nineteen years in New South Wales, stated in his evidence before the House of Lords, 9th June, 1848, that governor Sir Richard Bourke, in the despatch of 1837, "anticipated the evils which have since resulted, and which would have been averted if the course he recommended had been abided by."

The governor thus reasoned:—

"If it be objected that such an effective competition as I have described, arising from increased population and wealth, in itself indicates the propriety of raising the minimum price of 1837 over that of 1831, I would observe, that the crown lands now in the market form only a surplus; in many instances they may be justly called a refuse, consisting of lands which in past years were not saleable at any price, and were not sought after even as free grants. As improvement and population penetrate through the colony, such lands begin to acquire a value, and there is a stage in this process in which they are saleable at the present minimum price of 5s. By declining in future to dispose of them at this rate, it by no means follows that they will be sold at a higher. The result may be to retain them for an indefinite time unsold. Such a result, as your lordship appears fully aware

is the more likely, or rather certain, in consequence of the alternative at the settler's command of wandering without authority or restraint with his flocks and herds over the vast tracts of the interior. A facility in acquiring the actual property of land at a low price is the safest check to this practice, and it may here be observed, that the unauthorised occupiers of remote crown lands do not wholly consist of small flock-owners of slender means, but of the agents and shepherds of the wealthiest colonists residing within the limits of location, who are continually balancing between the opposite motives presented by the cheapness of unauthorised occupation on the one hand, and the desire of adding to their permanent property in land on the other. The extent of their purchases at the government sales corresponds with the prevalence of the latter motive, and it is easy to see that its influence must be weakened in proportion to the augmentation of the upset price.

"But though I am convinced that in almost every case the present value of land is obtained by means of the competition excited by public sales, yet it is possible that an augmentation of the minimum price would have the injurious effect of checking the immigration of persons possessed of small capital desirous of establishing themselves upon land of their own. There are very few new comers who possess sufficient means to purchase, at a price much above 5s., the large tract of land which in this country is absolutely necessary for even the commencement of an ordinary grazing establishment. Again, the inducements offered to retired officers to settle in the colony, by obtaining land at the minimum price, would be much diminished if that price were raised. These officers, both as regards numbers and character, are no small acquisition to the rural population of the colony.

"Apprehending, therefore, that to raise the upset price of crown lands would introduce much of the mischief I have represented; believing also that the influence of competition is becoming daily a more certain safeguard against the sale of any land below its just value; considering further the general impolicy of meddling without imperative necessity with any established system affecting so nearly the foundations of property, especially with one which has been found hitherto to operate so advantageously, I am unable to recommend any change in the minimum price at

which crown lands are, under the present regulations, offered to sale by public auction in New South Wales."

In 1840 Lord John Russell, then her Majesty's secretary of state for the colonies, sent a despatch to Sir George Gipps, governor of New South Wales, containing instructions, dated 23rd May, 1840, under the royal sign manual, respecting the settlement and alienation of waste lands in the colony. New South Wales was to be divided into three districts, northern, middle, and southern. In the middle district, the minimum upset price of land at public auction to be 12s. per acre; in the southern or Port Phillip district, all lands, in future, to be "open to sale at one uniform price" of 20s. per acre, subject to a few qualifications. Lord J. Russell stated, that £1 an acre appeared a reasonable price, advertising to the proceeds of sales hitherto; that it appeared to answer well in the neighbouring colony of South Australia, and that it would probably be advisable to offer lots for sale in sections of 160 or 80 acres; town lots to be at the rate of £100 per acre.

In 1840 (10th December), Sir George Gipps, then governor of New South Wales, forwarded to Lord John Russell a "Memorandum on the Disposal of Lands in the Australian colonies," in which he assumed that 5s. per acre was decidedly too low, as a minimum price, although he acknowledged that the land seldom produced at auction more, and that there was a glut of land in the market at that rate. The governor stated that in 1839 the minimum price was raised to 12s. per acre, and he gave the general results as follows:—

	Years.	Country Lands.			Town Allotments.			Country Lands and Town Allotments.					
		Acres.	Price per Acre.	Sum.	Acres.	Price per Acre.	Sum.	Acres.	Price per Acre.	Sum.			
Old Parts of the Colony.	1838	278,323	£. s. d. 0 5 4 $\frac{1}{2}$	£. 75,159	A. R. P. 185 3 26	£. s. d. 17 7 4	£. 3,228	278,509	£. s. d. 0 5 7 $\frac{1}{2}$	£. 78,387			
	1839	198,198	0 8 1 $\frac{3}{4}$	80,836	231 0 22	29 0 11 $\frac{1}{2}$	6,714				198,429	0 8 9 $\frac{1}{2}$	87,550
	1840	94,878	0 13 1 $\frac{1}{4}$	62,360	513 1 25	69 3 7 $\frac{1}{2}$	35,518				95,391	1 0 6 $\frac{1}{2}$	97,878
	1837	—	—	—	87 3 20	81 5 8 $\frac{1}{2}$	7,142				88	81 5 8	7,142
Port Phillip.	1838	38,653	0 13 3	25,587	41 1 12	213 11 7 $\frac{1}{2}$	8,826	38,694	0 17 9 $\frac{1}{2}$	34,414			
	1839	38,283	1 10 11	61,102	65 1 8	137 19 0	9,008	38,348	1 16 6 $\frac{1}{2}$	70,110			
	1840	82,729	1 12 11	136,367	169 2 16	487 16 2	82,732	82,899	2 12 10	219,100			

A great stimulus to the purchase of land was given in 1839-40, and '41, throughout Australia generally, but more especially at Port Phillip; it is not, therefore, surprising, that large sums were realized, both for town and country sections. In New South Wales, however, this was not the case, for the

quantity of country land sold greatly diminished, thus—1838, acres 278,323, at 5s. 4 $\frac{1}{2}$ d. per acre = £75,159; 1840, acres 84,878, at 13s. 1 $\frac{3}{4}$ d. per acre = £62,360. It was erroneously supposed, that because land sold at 12s., and, subsequently, at 20s. an acre, in South Australia, therefore the same price

could be realized in New South Wales; but it was forgotten, that independent of delusion at home, and peculiar circumstances, that a system of special surveys was introduced in South Australia, whereby any person binding himself to take 4,000 acres, might require a survey of 15,000, and out of this he might select his portion in lots of not less than eighty acres; so that with such a privilege, he selected all the good and left the bad land. He might also make his selection of a narrow strip with water frontage, thus rendering the back land unavailable for any one else. A gambling system was also introduced, by giving to the purchasers of a certain number of acres, gratuitously, or almost gratuitously, a lottery or raffle ticket for a town or building allotment, which, in some places, was very valuable. Many persons, in England, who bought land in South Australia during the period of the "land mania," have never, to this day, received one shilling in return for their outlay. The memorandum of Sir George Gipps is well nigh unintelligible; he condemns the system adopted in South Australia, as a gambling speculation, depending on a throw of dice; he considers, that "Australia is a pastoral country, and must remain such, for ages;" that "scarcely one hundredth part of the land sold by the government in Australia, is ever purchased for the purpose of being cultivated;" and that "the enterprising colonists who first drove sheep and cattle from New South Wales to South Australia, rescued that colony from ruin;" and yet, after an entire condemnation of the fallacies which were sedulously propagated respecting the "new principle," and the "sufficient price" at South Australia, Sir George Gipps appears to recommend to her Majesty's ministers, in England, the raising of the price of land in New South Wales, as a raw material, above 5s. per acre.

In this memorandum the governor of New South Wales thus correctly described the character of the squatters, and the extent to which squatting was then carried on:—

"A very large proportion of the land which is to form the new district of Port Phillip, is already in the licensed occupation of the squatters of New South Wales, a class of persons whom it would be wrong to confound with those who bear the same name in America, and who are generally persons of mean repute and of small means, who have taken unauthorised possession of patches of land. Amongst the squatters of New South Wales are the wealthiest of the land, occupying, with the permission of government, thousands and tens of thousands of acres. Young men of good family and connexions

in England, officers of the army and navy, graduates of Oxford and Cambridge, are also in no small number amongst them.

"At the end of 1839, the cattle depastured beyond the boundaries was returned as follows, though probably the real quantity was much greater: sheep, 1,334,593; horned cattle, 371,699; horses, 7,088. The number of acres in cultivation was also returned as 7,287."

In 1841 (17th July), the Colonial Land and Emigration Commissioners (T. F. Elliott, esq. and the honourable E. E. Villiers,) addressed a valuable letter to James Stephen, esq., under-secretary for the colonies, in which they stated that they could not agree in the recommendation of the South Australian committee, that the upset price of land should be at once raised in South Australia and the other Australian colonies. The commissioners observe, that while they deem the price of land should be progressively increased, until the object of establishing a due proportion between the supply and demand for labour, and between the population and the extent of territory occupied by it, shall have been accomplished; yet, that the extent to which the price of land can be raised, has limits beyond which no authority will avail; and, that just as the smuggler places a limit beyond which the duties of customs cannot be increased, so the squatter would defeat an indefinite increase of the price of land; for, as soon as the consideration demanded by government for granting a title became extravagant, persons would prefer the course of taking land without a title, and bearing the risk.

In the annexed paragraph, the commissioners clearly foretold the disadvantageous results attending an increase of price above the 12s. then prevailing in New South Wales:—

"It appears to us, that as to the possible effect of a low price in withdrawing persons from labouring for hire in the colony, there may be some misapprehension as to the state of facts. In North America, where lots were of small size, and their value was to be realised by force of human labour only, it is not questioned that too great a facility of acquiring land withdrew large numbers from the class of labourers. But in the Australian colonies, where land requires to be in large quantities, for the principal use to which it is turned, and where also the profit to be derived from it depends not upon mere human toil, but upon the acquisition and rearing of stock, requiring a considerable further outlay of capital, it may well be doubted whether the same effect is to be apprehended. We certainly do not remember to have seen it mentioned in any official accounts from these colonies, that land has been acquired by persons in the condition and with the means of labourers; and Sir George Gipps, in the memorandum which

forms one of the papers now under consideration, mentions, that it is 'rarely advantageous in any part of Australia for a newly-arrived emigrant to become a proprietor of land, unless his capital is considerable.' This would seem to imply that the temptation held out by land to people of small means is not very considerable. The truth, perhaps, is, that *various other causes, besides the price of land, must govern the usual rate of wages.* It is, we believe, generally understood, that where the capital which can be profitably used in employing labour is very large, in proportion to the number of labourers that can be obtained, wages will be high; and this will continue equally true, whatever might be the existing land regulations. We fear, therefore, that if we were to undertake progressively to increase the price of land until labour should be abundant, and employment as much divided as in old countries, *we might possibly extinguish the land sales before we should have reduced wages; that we might seriously diminish the resources for producing the great staple of the Australian settlements, and perhaps have engendered an extensive system of unauthorized squatting.* We feel the force of this apprehension the more, when we advert to the opinion of the committee, that after once a minimum price has been declared, it ought not to admit of being lowered, except by an act of the British Parliament."

In 1842, the system of sale by auction was resumed throughout the colony, at a minimum upset price of 12s. per acre for country lands, with liberty to select portions not bid for at the upset price.

In a speech delivered in Council by Sir George Gipps, the governor of New South Wales, on 9th September, 1842, he used these remarkable expressions:—"I do not advocate the putting the squatter on a par with the purchaser of crown land; to do this, would be effectually to nullify all the regulations which have been introduced for the disposal or sale of land, since land began to be of any value in the colony. * * * So obviously does the squatting system act to prevent the sale of crown lands, that the late secretary of state, in a despatch which has been laid before the Council (dated 20th June, 1840), pointed out the propriety of raising the price of a licence to depasture stock beyond the boundaries, to five or six times its present limit." It must, however, be admitted, that when the government adopted the theory of raising the price of land beyond its real value, the colony would, to a great extent, have been ruined, but for the squatters, whose exertions have increased the quantity of stock, and greatly multiplied the exportable produce of the settlement.

In 1843, the minimum price was raised to *twenty shillings* per acre, by an act of the Imperial Parliament, (5 and 6 Vict., cap. 36,) with liberty to select, at the upset price, country portions put up to auction and not

bid for, or on which the deposit had been forfeited. The land was offered for sale, in quantities of not less than a section, or one square mile = 640 acres. In 1843, a select committee of the Legislative Council of New South Wales was appointed, to enquire into and report upon the upset price of land. In the same year, and in 1845, "immigration reports" were laid before the Council. In the resolutions and petitions of the Council, founded on these several reports, urgent protests were made against the continuance of a policy which had been productive of the disastrous results of annihilating the land fund, and simultaneously depriving the colony of capital and labour, by which a series of social revolutions, and an unparalleled depreciation in the value of property were, in a great measure, to be attributed. It was stated, in this year, that about 5,000,000 acres had then been alienated from the crown in New South Wales; of these, about 3,500,000 acres had been granted, and about 1,000,000 acres had been sold, at a price of about 5s. per acre.

By an order of her Majesty in Council, dated London, 9th March, 1847, the lands of New South Wales were divided into three classes, according to their situation, to be denominated respectively—(1.) the *settled*; (2.) the *intermediate*; and (3.) the *unsettled* districts. The *first* comprised the settled and proclaimed counties of 1st January, 1838, and the counties of Macquarie and Stanley; also lands within three miles distance from any part of the sea coast, or two miles from certain parts of the rivers Glenelg, Clarence, and Richmond, or ten miles from the towns or townships of Portland, Alberton, Eden, Bathurst, Wellington, Macquarie, Ipswich, and a town at the head of the navigation of the Clarence river. The *second* comprehended the counties to be proclaimed on or before 31st December, 1848; and the *third*, all the other lands in the territory of New South Wales. [In this enumeration, the references to Melbourne and the Port Phillip districts have been omitted, as this portion of Australia is to be formed into a distinct colony.]

Under this order, the governor is empowered to grant leases or runs of land in the unsettled districts, for any term not exceeding fourteen years' duration, for pastoral purposes, with permission for the lessee to cultivate so much of the land in the said run as may be necessary to provide grain, hay, vegetables or fruit, to the amount

required for the use of the family and establishment of the lessee, but not for sale or barter. The rent to be proportioned to the number of sheep or cattle which the run may be enabled to support; each run to be capable of carrying at least 4,000 sheep, or an equivalent number of cattle, and not in any case to be let at a lower rent than £10 per annum, to which £2 10s. per annum shall be added for every additional 1,000 sheep, or equivalent number of cattle, which the run may be capable of carrying. A commissioner of crown lands to estimate the capabilities of the run. During the continuance of the lease, no person but the lessee to be suffered to purchase any of the run; but he to be allowed to buy the whole, or portions of not less than 160 acres, at a price of not less than 20s. per acre. On the *intermediate lands* the governor may grant leases as above for not more than eight years; but at the end of each successive year of the lease, these runs may be offered for public purchase, subject to sixty days' notice to the lessee. In the *settled districts* the governor may issue grants or depasturing leases for one year, without interference as to time of disposal of said lands by sale or lease.

In 1847 (11th September), a select committee of the Legislative Council of New South Wales on *immigration*, stated, that "the land fund—the source from whence any amount of expenditure incurred in immigration might have been defrayed, has been annihilated, in consequence of the determination to carry out the system of Mr. E. G. Wakefield; and the remonstrances of the colony against this ruinous system

have been unheeded or misunderstood." The committee state, that—

"For a series of years the growth of the colony was uniform, progressive, and uninterrupted. From 1833 to 1840, the sum realized by the sale of the waste lands was upwards of £1,000,000, and by the expenditure of this amount 80,000 souls were introduced. Under this system, the population became more than doubled in a period of eight years. In 1839, it was the policy of the imperial government to raise the upset minimum price of land from 5s. to 12s., and subsequently to £1 an acre. This act may be regarded as one chief cause of the disasters with which the colony has since been visited, and of its present depressed condition. From £300,000 a-year the land revenue fell to £8,000, and immigration ceased; the sources from whence it had been defrayed, having been thus suddenly arrested."

In 1847 (23rd July), a select committee, consisting of ten members of the Legislative Council of New South Wales, was appointed to inquire into and report upon what ought to be the minimum upset price or prices of land in the various counties and districts of New South Wales. On 27th September, 1847, the committee made a report, of which the following is an abstract. All the witnesses examined, whether favourable or unfavourable to the maintenance of a high minimum price, agreed that 20s. does not in any degree represent the exchangeable value of an acre of land in New South Wales; and that, therefore, the declaration of the Imperial Parliament, that land shall not be sold till it realises £1 per acre, is a declaration that land shall not be sold until it realise more than it is worth; or, in other words, that except in particular instances, land shall not be sold at all. In confirmation of this statement, the following table is adduced:—

Prices of Crown Lands and Quantities Sold from 1837 to 1846, both inclusive.

Year.	5s. per acre, Country.	12s. per acre, Country.	20s. per acre, Country.	Upwards of 20s. per acre.		Special Surveys, in Acres.	Total Acres Sold.	Total Amount for Lands sold.
				Town.	Country.			
1837	368,483	—	—	212	—	—	368,695	£121,962
1838	315,059	—	—	228	30	—	315,318	128,865
1839	249,896	30,218	2,664	2,785	351	—	285,915	166,713
1840	68,873	111,720	2,058	5,525	1,291	—	189,468	324,072
1841	—	16,430	3,310	248	153	66,199	86,341	92,636
1842	—	4,898	1,340	170	471	15,023	21,903	18,312
1843	—	616	3,205	157	717	121	4,817	12,205
1844	—	—	3,822	245	190	—	4,259	9,174
1845	127	—	4,440	1,754	945	—	7,267	18,025
1846	—	103	2,841	282	3,791	—	7,018	27,700
1847								
1848								
1849			No	detailed	returns.			
1850								
Total	1,002,440	163,985	23,683	11,611	7,942	81,343	1,291,006	£919,669

Note.—Roods and Perches, and Shillings and Pence are excluded

From the foregoing table the committee adduced the facts—

“That the sum realised by sales of land in 1846 is less by £3,000 than one-fourth of the sum realised from the same source in 1837. It will also be observed, that in the five years which have elapsed since the raising of the minimum price to £1 an acre, the whole sum realised by land sales is not quite £80,000, or two-thirds of the sum realised in the single average year 1837; and the whole number of acres sold about 45,000, or less than one-eighth of the number sold in 1837. The result is more strange, when it is observed, that in 1837 the population of the colony amounted to 85,000 persons, while, in 1846, the population amounted to upwards of 196,000. Thus by unwise legislation has the permanent settlement been retarded in proportion as the demand for it has increased; and thus is the fallacy, that land can be made saleable at this price by the introduction of population, practically refuted. But it has been said by Sir George Gipps, that it is to the insolvency, which was unfortunately so general a few years ago, and not to the high minimum price, that the cessation of land sales is to be attributed. If so, we may expect to find the same paralysing influence extended to all markets as well as the land market. The comparison of 1837 with 1846 will completely show the fallacy of this suggestion. In 1837 the value of exports from the colony was £760,000. In 1846 the value was £1,481,000, or nearly double. In 1837 the ships entered inwards were 400, of the burden of 80,000 tons. In 1846 the ships entered inwards were 767, of the burden of 141,000 tons. In 1837 the proceeds of sales by auction were £321,000; in 1846, £414,000. In 1837 the coin in the treasury, military chest, and banks, was £427,000; in 1846, £827,000. Thus, while our exports, our shipping, our circulating medium, and our population have doubled; while the proceeds of sales by auction have increased one-fourth, the proceeds of sales of land have decreased by more than three-fourths.”

The inference deduced from these facts by the committee is that while—

“The producer of colonial exports is content to sell his commodity at the price which it will bring, the shipowner looks only for the current rate of freight; the importation of capital is regulated by the rate of exchange; but the government, the great proprietor of land, refuses to regulate its dealings by these principles, repudiates the doctrine of supply and demand, and insists upon holding this commodity, of which it has practically the monopoly, till it realise a price, of obtaining which no practical man can see the probability or even the possibility. Thus, while every other branch of industry is carried on with the greatest activity and success, the settlement of the country, to which they ought all to be considered as subsidiary, stands still, and the mind is astonished by the anomalous spectacle of a colony active, enterprising, and energetic in all things, except the one alone for which it was founded—colonization.

“It seems impossible to reconcile this system not only to any views of sound policy but to any policy at all. If the government regard these lands as a mere vehicle of revenue, as the means of raising the largest possible sum, narrow and unstatesman-like as such a view may be, this is not the way to carry it out. The figures above quoted show that the price is so exorbitant, that every other element of wealth in

the country may double and leave it still a virtual prohibition. How often this multiplying process is to be repeated before the pressure of population and the increase of wealth will render these lands saleable at £1 an acre it is impossible to say; but to judge by the moor lands of England, and the bogs of Ireland, the period is yet extremely remote. It must also be remembered, that even if the government should succeed in selling land at £1 an acre twenty years hence, for which now only 5s. could be obtained, the government, allowing for compound interest at the rate of interest which money now commands in the colony, is considerably a loser; add to this, that by destroying the land fund, the government is not merely foregoing a revenue which would be cheerfully paid and easily collected, but it is destroying future revenue by arresting the influx of that labour from which land derives so much of its value. It is not merely refusing to sell a commodity, but it is depreciating that commodity for ever. The supply of land which may become saleable by the government is, for all practical purposes, infinite. What quantity will become saleable, depends upon the increase of population. Government, therefore, as a mere dealer in land, has a direct interest in selling so much of it as will keep the tide of population continually flowing towards its yet unsold possessions.

“It is also the interest of government to attract capital. In this also it has signally overreached itself. The principle of a uniform fixed price contains in it this objection, that that price must be tolerably high, since upon it alone the government relies to protect its interests, but it has the countervailing advantages of certainty of amount and facility of operation. The principle of sale by auction has not these advantages, but it offers to the capitalist the attraction of referring not to any arbitrary standard, but to fair competition to fix the value. The government has rejected all that is attractive in each of these systems, and retained only what is repulsive. Enough of the fixed price is retained to make the purchaser sure that he will not get the land cheap; enough of the principle of competition to make him uncertain whether he shall get it at all.

“The facilities of steam and railway communication are gradually drawing mankind together, and countries possessing wild lands for sale, are beginning to enter into competition with each other. It is becoming daily more impossible to regard this as an isolated question. In determining the price of land, the competition of other countries ought not to be left out of sight. At the Cape of Good Hope land can be obtained for one-tenth, in Canada for one-fourth, and, as it appears recently, in the United States, for one-fortieth of the sum demanded for a like quantity here. In utter defiance of the principles of political economy, it is expected that persons will give for our poor and inaccessible land four, five, ten, or forty times the price at which nearer and more accessible land may be obtained. It is assumed that one acre of land in Australia equals in value four in Canada, five in the United States, ten at the Cape of Good Hope, and forty in the territory recently ceded to the United States by the Chactaw Indians. Your committee apprehend, that as regards the greater part of the lands of this colony, it is perfectly immaterial whether the minimum price fixed be £1 or £20 an acre. The former price is shown, by reason and experience, to be utterly unattainable, and the latter is no more.

“Your committee would wish to be understood as

by no means undervaluing the great advantages derived by the colony from pastoral pursuits, but they are desirous of expressing their opinion that the home government, by prohibiting the sale of land, has given an undue stimulus to those pursuits, and undue discouragement to agriculture and settled industry. The prohibition of the purchase of land has aggravated that tendency to dispersion which it was designed to counteract. The true policy, in the opinion of your committee, is neither to stimulate nor check this tendency to dispersion, which is the natural precursor of that state of society in which the tendency to concentration arises. Unhappily, the government has not observed this rule. In its anxiety to concentrate the population, it has placed a price on land which rendered it impossible for those who occupied it to occupy as purchasers. The occupation has been conceded, the proprietorship has been withheld, and thus has the industry of the colony been forced into the channel most consistent with occupation without title, and the policy which ambitiously aimed at forcing the colonists prematurely to become villagers and agriculturists, has resulted in compelling them to become shepherds and herdsmen. Had the prohibitory price thus imposed been the result of a sincere though mistaken conviction, your committee, while deprecating its impolicy, could not have murmured at its injustice. But it is now notorious in the colony, and can be proved by unquestionable evidence, that it was not with a view to the welfare of New South Wales, but of South Australia, that this obnoxious law was passed. Colonel Torrens and his brother commissioners, the founders of the South Australian colony, felt that it would be impossible to obtain £1 an acre for land there, while land of the same quality could be obtained at 5s. an acre here. They felt that whatever were the merits of their scheme, it would not bear the test of the free-trade principle of competition, and they sacrificed, without remorse or hesitation, the present and actual interests of the older colony, to the future, and, as it has turned out, visionary prospects of the younger. Thus it happens, that 200,000 persons are impoverished, that their interests may not stand in the way of the imaginary interests of 25,000; and while colony after colony has been emancipated from the £1 an acre system, New South Wales has been unable to obtain her deliverance, precisely because, to her, that deliverance would be most valuable. Van Diemen's Land is of too small extent—New Zealand is too distant—to impair, by their competition, the working of the £1 an acre system in South Australia. If the land of New South Wales were rich, the continuance of the price would be a matter of indifference; if the land were small in quantity, the reduction of the price would be unimportant; it is the great quantity and poor quality of the land—the very causes which render the high price ruinous to New South Wales—that constitute its principal attractions in the eyes of the South Australian commissioners."

From a return made to government, up to June 30th, 1836, it appears that the land comprised within the then nineteen counties of the colony, was upwards of 25,000,000 acres, of which only about 5,000,000 acres had been alienated; showing that there was, consequently, abundance still left within the settled districts for cultivation, if required. The best lands had been selected by those

who received grants, the next best put up to sale by government at 5s. an acre; after selections had been made for several years at this price, the third best were offered at 12s. an acre; and, finally, the refuse or remainder of these grants and sales was put up for sale by auction at 20s. per acre. (Evidence before Legislative Council, 14th August, 1847.)

After these forcible arguments, the Legislative Council committee proceed to show, with a warmth which is, perhaps, only too excusable, that it would have been happy for the colony, if the ruin of her land fund—the dispersion of her people—the stoppage of immigration—and the dissemination of a just spirit of discontent, had been the only results of this high minimum price. A party arose in the colony, a class termed "squatters," who, forbidden by the policy of the government to buy land, were forced to occupy it, and did so, under the authority of the government, on a *lease* of 1d. per acre, until the lands thus occupied were *purchased* at £1 per acre. Hence, the squatters—men of intelligence, education, property, and good family in England, who had made New South Wales their home—began to feel that they had a vested interest in maintaining the prohibitory price, as a guarantee that their occupation would not be disturbed; the result is, that "the land possessions of the British crown in New South Wales have been in a manner *alienated*." The settlers object to the land-orders which authorise leasing at 1d. per acre, because they confiscate the lands of the colony; the squatters approve of them, because they see no limit to the term of their occupation; under them, temporary occupation is consequently equivalent to permanent alienation—thus the system has led to grants of land on the most lavish and extravagant scale. By the process now in operation, it is alleged that all the desirable land within the nineteen counties, and *beyond the settled districts*, viz., about 1,800,000 acres, have been, in reality, bestowed on about 1,800 persons, at the rate of 100,000 acres per head, in a country where there is one inhabitant to every 100,000 acres, and has coupled with this premature appropriation, a regulation prohibiting agriculture. Thus, it is asserted, dispersion is enforced; co-operation, the division of labour, religious and secular instruction, are all out of the question; landed property is accumulated in the hands of a few to the

exclusion of the many; and the high minimum price of land (20s. per acre) has operated as a bar to the natural and secure investment in the soil of the surplus capital of the colony, hazardous speculation has been consequently encouraged, and capital forced into other and less legitimate channels. The opponents of the high minimum price of land do not deny the benefits arising from the sale of waste lands; or that a sum of nearly £1,000,000 was raised by such sale in New South Wales, in ten years, whereby 50,000 immigrants have been introduced into the colony; but they contend, that of the gross proceeds of the land sales (£920,000), £835,000 were received during the first five years of the period, when the price of land was under 20s. an acre, and but £85,000 during the second period of five years, when the minimum price was 20s. an acre; thus, if the sum raised from land has been the means of introducing 50,000 immigrants, 46,000 have been introduced by land put up under 20s. an acre, and 4,000, only, by land put up at 20s. an acre. In other words, had the price remained unaltered, the colonists might have raised £2,000,000, instead of £1,000,000, and introduced 100,000 immigrants instead of 50,000. It is in evidence, that no land has been purchased for grazing purposes at 20s. an acre; according to some witnesses, 10s. per acre would be a fair price for arable, and 5s. per acre for grazing land. According to Mr. De Salis, 2s. 6d., and a rent equivalent to four per cent. would be a proper valuation. Mr. Ogilvy thinks 1s. an acre sufficient. There is much land on which a rabbit could not feed, and 3s. an acre would be gladly received for 10,000 acres in the county of Macquarie. Many large tracts of a deep dark rich soil are covered with dense forests, which are not likely to be cleared for years to come.

Mr. Justice Therry, in his evidence before the House of Lords (9th June, 1848), being asked to what he attributed the considerable falling off in the land sales of New South Wales, of late years, answered—

“Principally I should attribute it to the minimum price of land being £1 an acre, and to the great extent to which, in consequence of this price, the squatting system has extended, as well as to the great facility afforded for the occupation of land without purchase; that naturally prevents the sale of land. If a person can occupy and use land without buying it, and buying too at a price beyond its value, it is plain he will not purchase it.”

The witness proceeded to say, that so far

from 20s. upset price for land having a tendency to secure the concentration of the population, as was alleged would be the case, it had quite the contrary effect, and had promoted dispersion, by a system which operates as a prohibition upon the sale of land. This experienced judge fully corroborated the statements of the Legislative Council Committee, and asserted, that “the squatters have an occupation which they consider as almost equivalent to the proprietorship of the soil: for all practical purposes, they have an ownership of the land almost as if they had purchased it.” Four acres to *one* sheep, would entitle the squatter, having the smallest required number of sheep (4,000), to 16,000 acres of land; and it must be evident he could not afford to pay 20s. an acre, or £16,000, for mere pastoral purposes.

In 1848 (29th March), the governor issued regulations for the occupation of crown lands *within the settled districts*; viz.—*First*. That holders of purchased lands within those districts may depasture stock on vacant crown lands immediately contiguous to their respective properties, but that they shall only possess a *commonage* right, to be enjoyed alike by all the holders of adjacent purchased lands, and may not erect any hut or building, or clear, enclose, or cultivate any portion thereof. *Second*. That sections of not less than 640 acres will be let, with exclusive right, for one year, at a rent of not less than 10s. per section, for pastoral purposes only. Leases not assignable, or lands to be sublet. Wood, excepting cedar, may be cut for fencing stock-yards, for fire-bote, or domestic uses. Lands open to purchase under the ordinary regulations: lessee to receive a notice of one month. The secretary of state for the colonies has authorized the local government of New South Wales to raise a loan of £100,000 for emigration purposes, on the security of the land revenues of the colony, but declined to alter the upset price of 20s. per acre for land. It is rightly deemed that any alteration in price ought to apply to all the southern colonies; and her Majesty's government propose to leave the settlement of this question to the United Assembly of all the Australasian colonies. It will, however, be a very difficult matter, owing to the interests which have grown up under the present system.

The quantity of land sold, and the proceeds thence derived, in New South Wales and Port Phillip, and the amount derived

from squatting licences, are thus shown since 1831 :—

Year.	Number of Acres Sold.	Purchase Money.	Squatting Licences.
		£	£
1831		2,597	—
1832	20,860	12,509	—
1833	29,001	24,956	—
1834	91,399	41,484	—
1835	271,947	87,097	—
1836	389,546	123,049	3,680
1837	370,376	117,583	4,780
1838	316,160	115,825	6,280
1839	272,620	166,578	11,675
1840	189,787	317,251	13,300
1841	85,776	93,387	15,701
1842	10,673	19,444	16,255
1843	5,227	11,664	19,823
1844	4,260	9,016	32,031
1845	7,747	22,821	38,943
1846	7,683	30,183	42,749
1847	28,726	76,962	43,075
1848	21,480	41,919	46,903
1849 } 1850 }	. . . . .	No returns.	. . . . .

In 1848 the whole quantity of land sold in the New South Wales district was only 3,472 acres, and the sale proceeds £7,384; in the Port Phillip district, 18,007 acres, proceeds, £24,030. The revenue derived from squatting licences, in 1848, was—*within*

[Further details on the land sales given in the Supplement.]

the settled districts, New South Wales, £1,116; Port Phillip, £383 = £1,549; *without* the settled districts, New South Wales, £26,490; Port Phillip, £18,863 = £45,353.

The subjoined table shows by whom, and the period, the government of the colony was respectively administered since its foundation on the 26th January, 1788 :—

	From	To
Captain Arthur Phillip, R.N.	Jan. 26, 1788	Dec. 10, 1792
Captain Francis Gross (Lt.-Gov.)	Dec. 11, 1792	Dec. 14, 1794
Captain Paterson, New South Wales Corps (Lieut.-Gov.)	Dec. 15, 1794	Aug. 6, 1795
Captain Hunter, R.N.	Aug. 7, 1795	Sept. 27, 1800
Captain P. G. King, R.N.	Sept. 28, 1800	Aug. 12, 1806
Captain W. Bligh, R.N.	Aug. 13, 1806	Jan. 26, 1808
Major-gen. Lachlan Macquarie.	Jan. 1, 1810	Dec. 1, 1821
Major-gen. Sir T. Brisbane, K.C.B.	Dec. 1, 1821	Nov. 30, 1825
Colonel Stuart, 3rd Reg., or Buffs (Lieut.-Gov.)	Dec. 1, 1825	Dec. 18, 1825
Lieutenant-gen. Ralph Darling	Dec. 19, 1825	Oct. 21, 1831
Colonel Lindesay, C.B. (Lt.-Gov.)	Oct. 22, 1831	Dec. 2, 1831
Major-gen. Sir R. Bourke, K.C.B.	Dec. 3, 1831	Dec. 5, 1837
Lieutenant-col. Kennett Snodgrass (Lieut.-Gov.)	Dec. 6, 1837	Feb. 23, 1838
Sir George Gipps	Feb. 24, 1838	July 10, 1846
Sir M. C. O'Connell	July 11, 1846	Aug. 2, 1846
Sir Charles Augustus Fitzroy	Aug. 3, 1846	—

Note.—Captain Bligh was suspended as Governor on the 26th January, 1808, and from that period to the 28th December, 1809, the government was successively administered by lieutenant-colonel G. Johnstone, lieutenant-colonel Foveaux, and colonel W. Paterson, all of the New South Wales Corps. afterwards 102nd Regiment

CHAPTER II.

TOPOGRAPHY, PHYSICAL ASPECT, MOUNTAINS, RIVERS, AND HARBOURS, COUNTIES GEOLOGY, SOIL, MINERALOGY, CLIMATE, AND DISEASES.

NEW SOUTH WALES (so called by captain Cook, from its fancied resemblance to the South Wales of England,) occupies the eastern portion of the Australian continent; its northern and western limits are not yet definitely assigned; on the east it is bounded by the South Pacific Ocean, and on the south, by the province of Port Phillip or Victoria. For the reason just mentioned, it is at present impossible to state its area.

Physical Aspect, Mountains and Rivers.—The general features of the surveyed districts are alternate hills and valleys, mountains and plains. The "mountain belt" of Australia, already referred to (p. 370), is known in different parts of the province under distinct denominations, viz., as the Blue Mountains, in the vicinity of Sydney;

Liverpool Range, in its northerly, and the Australian Alps, in its southerly extension. This lofty ridge, which runs nearly parallel to the coast, at a distance of thirty to fifty miles, separates the waters that flow towards the sea from those that have an inland course; its mean altitude is estimated, by Count Strzelecki, at 3,500 feet above the sea. The same accurate observer states the average fall of the coast or easterly rivers at forty-eight feet in every mile; the average slope produced by the transversal spurs being ninety-six feet; and the average fall of the westerly waters, at nine feet in every mile; that of the country within seventy-two miles from the crest of the dividing range being twenty feet. The intervening space between the mountains and the sea is

occupied by a gently undulating surface, intersected by water-courses; in some places well wooded, in others covered with dense scrub, and gradually rising to the westward in groups of isolated hills, or small and broken ranges, branching out from the ridge of high land, which, winding from north-east to south-west, forms a continuous and clearly defined line visible against the horizon as far as the eye can reach. In 30° S. lat. this chain divides the sources of the river Peel, running to the westward, from those of the Hastings, flowing north-east, towards Port Macquarie; further to the south, one of its eastern spurs separates the river Manning from the river Hunter, after which, assuming a westerly direction, it divides in its windings the tributaries of the Hunter from those of the Peel. This portion of the chain, distinguished by the name of Liverpool range, is crowned by several peaks of greenstone, whose bare and unshapen tops attain an elevation of 4,700 feet. From two of these, Mount Oxley and Mount M'Arthur, the view is extensive and very pleasing; to the westward of them, at the point where it divides the river Goulbourn from the Talbrager, the chain turns suddenly to the south-east, but resumes its south-westerly direction at a locality rendered remarkable by the peaks of Coricudgy and Payan, and the sources of the Colo and Cudgegong. At Cullenbullen the chain is granitic, and throws off a remarkable basaltic spur to the eastward, whose numerous and intricate ramifications render the Blue Mountains so difficult to explore, and even to approach. Mounts Adine, Clarence, King George, and Tomah, crown the northern and loftier branch; mounts Hay and King's table land, the southern. "Between these ranges," says Count Strzelecki, "lie yawning chasms, deep winding gorges and frightful precipices. Narrow, gloomy, and profound, these stupendous rents in the bosom of the earth are inclosed between gigantic walls of sandstone rock—sometimes receding from, and sometimes frightfully overhanging the dark bed of the ravine, and its black silent eddies, or its foaming torrents of water." "Everywhere," he adds, "the deep recess is full of danger, and the issue almost impracticable. At the foot of Mount Hay, the river Grose flows through a sandstone ravine, the perpendicular depth of which is 1,500 feet." To return to the main range—at the part from whence this spur branches out, it is composed of sienite

and granite; thence extending for a few miles to the south-west, it gives rise to Cox's river, and forms the Walerawang and Clwyd valleys; it then takes a south-east direction, and is known by the name of the Honeysuckle range; the mean elevation of its crest is 4,050 feet; twenty-five miles beyond, bending again to the south-west, it rises to 4,500 feet, its character alters, and the eye rests on naked sienitic peaks, instead of richly wooded greenstone summits. A spur shoots off to the northward, which, in its windings, separates the river Macquarie from the Abercrombie, while the chain itself becomes lower, less precipitous, and more wooded. At Mount Fitton, about the source of the Wollondilly, and at the head of Lake George, this character again somewhat alters. At the last named locality, a westerly spur, composed alternately of serpentine and porphyries, divides the tributaries of the Murrumbidgee from those of the Lachlan, winding its way through a very broken country. Further on, beyond Lake Bathurst, another branch stretches to the north-east, but the chain continues its southerly course for about sixty miles; then changing again to south-west, it assumes a bolder aspect, its greenstone and sienitic crest at times resembling Alpine table-land; and others, rising in clearly defined and dentiform summits, capped here and there by snow, even in the midst of summer. The remarkable spurs which shoot out from both sides of the ridge at this point, are distinguished by the same marked features; that which, passing to the eastward, flanks the river Shoalhaven from its source to its mouth, renders the whole track over which it passes broken and intricate; and that, which running in an easterly direction, winds between the rivers Murrumbidgee, Coodrabidgee, and the Doomut, is of very striking formation, its lofty ridges enclosing the channels of the rivers just mentioned, whose sources are marked by a cluster of broken peaks. We now arrive at that portion of the range denominated the Australian Alps, of which, however, only one remarkable eminence is included in the limits of New South Wales, that one named Mount Kosciuszko by its explorer, Count Strzelecki, is described by him as one of those few elevations, the ascent of which, far from disappointing, presents the traveller with all that can remunerate fatigue. Its altitude of 6,500 feet, raises it above the adjacent mountains, and the view from its summit

embraces 7,000 square miles. Beneath the feet, looking from the very verge of the cone downwards almost perpendicularly, the eye plunges into a fearful gorge 3,000 feet deep, in the bed of which the sources of the Murray gather their contents, and roll their united waters to the west.

No known volcanic mountain exists in New South Wales, unless we reckon as such an eminence named Mount Wingen, situated near the sources of Hunter's River, where the process of combustion was, in 1818, discovered to be going on. Two visits were made to it in 1830 and 1831, by the Rev. C. P. N. Wilton (then chaplain at Newcastle), who published, in the *Australian Almanac* for 1832, the interesting account of which the following is an abstract:—

"Mount Wingen is situated on the south-eastern side of the dividing range which separates the lands of Hunter's River from Liverpool Plains, in 31° 54' S. lat., 150° 56' E. long.; and the elevation of the portion of it under the process of combustion cannot be less than from 1,400 to 1,500 feet from the level of the sea. At the period of my first visit, in the beginning of last year, this comprehended parts of two declivities of one and the same mountain, composed of compact sandstone rock. The progress of the fire had previously been down the northern and highest elevation, and it was then ascending with great fury the opposite and southern eminence. From the circumstance of its being thus in a hollow between two ridges of the same mountain, a former visitor was probably induced to give the clefts in the mountain the appellation of a crater; but, the fact is, the rock, as the subterranean fire increases, is rent into several concave chasms of various widths, of which I had an opportunity of particularly examining the widest. The rock, a solid mass of sandstone, was torn asunder about two feet in width, leaving its upper and southerly side exposed to view, the part so torn asunder having slipt down, as it were, and sunk into a hollow, thus forming the concave surface of the heated rock. On looking down this chasm to the depth of about fifteen feet, the sides of the rock were perceived to be of a white heat, like that of a lime-kiln, while sulphureous and steamy vapours arose from the aperture, amidst sounds which issued from a depth below, like blasts from the forge of Vulcan himself. I stood on that portion of the rock which had been cleft from the part above,

and on hurling stones down into the chasm, the noise they made in the fall seemed to die away in a vast abyss beneath my feet. The area of the mountain, over which the fire was raging, was about an acre and-a-half in extent. There were throughout it several chasms varying in width, from which are constantly emitted sulphureous columns of smoke, accompanied by brilliant flame, the margins of these being beautified with efflorescent crystals of sulphur, varying in colour from the deepest red orange, occasioned by ferruginous mixture, to the palest straw colour, where alum predominated. A black, tarry, and lustrous substance—a sort of bitumen—abounded on the edges of several of the clefts. Specimens of this were with difficulty obtained, from the intense heat under foot, and the suffocating quality of the vapours emitted from the chasms. No lava or trachyte of any description was to be met with, nor was there any appearance of coal, although abounding in the vicinity. The mountain has evidently been on fire for a great length of time, several acres above the part now under combustion, on which trees are standing of a great age, having, as it were, been steamed, and many of the stones upon it bearing the appearance of vitrification. The fire is still raging, and will probably continue to do so with increasing fury. Materials from beneath from time to time become ignited, whether by electricity, or other unknown cause, and the expansive power of the heat and steam, shiver and split into huge masses the solid rock of sandstone, and thus form continued chasms. The sulphureous and aluminous products of the mountain have been successfully applied in the cure of the scab in sheep."

About four miles along the shore from Newcastle, towards Red-head, the cliff was also observed, in 1828, to be on fire, evolving sulphureous vapours; and a beautifully crystallized mineral, which appeared, on examination, to be muriate of ammonia intermingled with sulphur, was collected from the margin of the crevices. This fire, however, in 1830, became extinct;—unlike that on Mount Wingen, of his second visit to which Mr. Wilton thus speaks:—

"The fire, since the period of my former visit, had, I found, been by no means inactive, having extended over a surface exceeding two acres, and was now raging with increased fury up the eminence to the S. and S.S.W., and also on the hitherto

extinct portion of the mountain—the northern elevation. There were still most splendid crystals of sulphur on the margins of the more extended crevices, where the fire was burning with a white heat, and of ammonia on those of the less, from both of which suffocating fumes were incessantly evolving. The fire continued roaring beneath, and stones thrown down into the chasms resounded to a great depth in an interior abyss. The scene of disruption, the rocks of solid sandstone cleft asunder, the innumerable fractures made on the surface, the falling in of the strata, the half-consumed prostrate trunks of trees, and others only awaiting the slip of the rock beneath them to fall in their turn, the pernicious vapours arising around, amidst the roaring of the internal fires, and the white and red heat of the burning crevices, present an appearance on which the beholder cannot fail to gaze with wonder, and, at the same time, to lament his inability to account with any degree of certainty for the first natural cause of the spectacle before him.

“At a little distance from the burning portions of Wingen, I picked up several amorphous specimens of cornelian, white, pinkish and blue; angular fragments of ribbon and fortification agates, and balls of agate, some of them filled with crystals, varying from the size of a pea to that of a hen’s egg, and others of a blueish-white and clouded colour, having spots of white dispersed throughout them, which, if cut and polished, would present a very beautiful variety of this mineral. Mount Agate, also in the neighbourhood of Wingen, presented me with some fine specimens as well of agate (fortification and ribbon occurring in the same specimen,) as fragments of white and blueish cornelian; and had not the grass upon the mountain been so long and thick as it proved to be, I should, doubtless, have collected much finer.

“Several of the agates collected from Mount Wingen, upon examination, were found to have their surfaces crusted over with iron; some of those from Mount Agate with native copper; while others, from the same locality, presented a most beautiful auriferous appearance. On Mount Wingen we found, within but a few yards of that portion of it which is now under combustion, the cast of a bivalvular fossil shell in sandstone, a species of *terebratula*; other similar specimens have been met with on another part of the mountain. Only two specimens

of organic remains, of the nature of petrified bone, have hitherto been discovered in the neighbourhood of Mount Agate; viz. the sacrum of some large animal, on the Holdsworth downs, and the second cervical vertebra of another, about ten miles west from Merton; but, in neither instance was the petrification imbedded in the subjacent strata, but merely lying on the surface of the soil; and, therefore, most probably, contemporary with the petrified wood, which is found scattered very abundantly over this tract of country. Near the chain of the Kingdon Ponds, forming one of the sources of the Hunter, and rising in the dividing range a few miles N. by W. from Mount Wingen, are stumps of trees standing upright in the ground, apparently petrified on the spot where they formerly grew. In some places the wood is strongly impregnated with iron. About three miles along the coast south of Newcastle, in an upright position, at high-water mark, under the cliff, and beneath a bed of coal, was also lately found the butt of a petrified tree, which, on being broken, presented a fine black appearance, as passing into the state of jet; and on the top of the cliff at Newcastle on which the telegraph stands, imbedded at about a foot beneath the surface, lying in a horizontal position, and nearly at right angles to the strata of the cliff, the trunk of another, finely grained and white—both specimens being traversed by thin veins of chalcedony. The coal which is exposed to view on the face of the cliffs, is of the independent formation, and appears to run generally in three parallel horizontal beds; but in some places with a varying dip. It alternates, in one part of the cliff, with slaty clay, sandstone, and shale, with impressions of leaves; at another, with mill-stone grit and a hard cherty rock. Nodules of clay ironstone, and trunks and stems of arundinaceous plants in ironstone, are seen in abundance on the alternating strata of the cliff; and in one place a narrow bed of ironstone, bearing impressions of leaves, is remarkable; while thin laminae of the same mineral, the surface of which is traversed by square and variously-shaped sections, are seen on several parts of the shore, both in the face of the cliff parallel with the beds of coal, and extending into the sea, forming the strand at low water.”

The following table (derived from Count Strzelecki’s valuable work), shows the altitudes, in English feet, above the level of the sea, of the most remarkable mountains,

lakes, watercourses, plains, and stations in New South Wales and Port Phillip or Victoria, as determined by the barometer; those included in Port Phillip being given

here with the idea of affording a more just view of the relative elevation of the most remarkable positions in each province:—

Name of Heights	Feet.	Name of Heights.	Feet.
Peel Plains, New England	1,800	Guantewang, north-east of Wellington Vale	1,410
Mount Mitchell	4,120	Camden, estate of James M'Arthur, Esq.	248
Mount Lindesay	5,700	Mount Prudhoe, summit above the road	1,006
Mount Sturt	3,735	Stone Quarry Creek, below the bridge	482
River Cumdamine, 28° 10' S. lat., 151° 40' E. long.	1,402	Crisp's Inn, Myrtle Creek, Camden County	783
Rocky Creek	1,717	Bed of Myrtle Creek	643
Brushy Valley, 28° 20' S. lat., 151° 20' E. long.	1,504	Bargo River, Ford	771
Apple Tree Flat	1,091	Lapton's Inn	1,206
Dumaresq River, 28° 55' S. lat., 150° 40' E. long.	840	Little Forest Hill	1,923
Glen River, 29° S. lat., 151° 35' E. long.	1,049	Cutter's Inn, Camden County	1,967
Gwydir River, 29° 35' S. lat., 150° 25' E. long.	895	Mittagong Range [summit]	2,454
Mount Hundawar, or Harkwick, 30° 15' S. lat., 150° 25' E. long.	2,545	Cockatoo Farm	2,222
Barrow Valley, 30° 40' S. lat., 150° 20' E. long.	808	Cockatoo Hill	2,356
Wallambora Ford, 30° 40' S. lat., 150° 25' E. long.	1,016	Berrima Inn	2,096
Mount Bathurst, 31° 5' S. lat., 151° 50' E. long.	4,000	Bed of Wingecarrabee River	2,058
Glen Apsley River, 31° 5' S. lat., 152° E. long.	1,000	Bed of Black Bob's Creek, under the bridge	2,051
Bathurst Cataract, New England	235	The Kentish Arms Inn, three miles beyond Midway Rivulet	2,023
Beckett's Cataract	150	Bed of Midway Rivulet, Camden County	2,003
Mount Sea View	6,000	Summit of Stony Hill	2,400
Macquarie Cataract, 31° 55' S. lat., 148° 10' E. long.	680	Wombat Brush, terrace above Paddy's River	2,128
Summit of Lapstone Hill, Cook County	747	Ford of Paddy's River, Camden County	1,856
Springwood, depot, Cook County	1,147	Arthursleigh, estate of H. M'Arthur, Esq., Argyle Co.	1,977
Station on the Mount Road, Blue Mountains	1,707	Norwood, Argyle County	2,116
Caley's Repulse, Cook County, Blue Mountains	1,868	Rossville House	2,057
Twenty-four Miles Hollow, Cook Co., Blue Mountains	2,738	Breadalbane Plains	2,278
King's Table Land, Cook County, Blue Mountains	2,790	Summit of Hill, south of Wallagoray	2,606
Stone Quarry, one mile beyond King's Table	2,882	Tarrago Ponds, Argyle County	2,264
Weather Board Hut	2,844	Gidleigh, estate of Captain P. P. King	2,358
Mount Hay	2,425	Sugar Loaf, or Squall Hill, near Gidleigh	3,288
Mount Tomah	3,240	Big Creek, near the Gap through the Black Range	2,979
Foot of Mount Victoria, Flagan's House	2,607	Head of Big Creek and Stony Creek	3,136
Mount George	3,620	Summit of Prospect Hill	3,275
Bridge over Butler's Rivulet, Vale of Clywd	2,188	Last Hill	3,176
Mount York, Vale of Clywd, Blue Mountains	3,440	Wollondilly River, below Rossville	1,971
Foot of Mount York, Collet's Farm	2,182	" at the Junction of Paddy's River	1,840
Mount Adine	3,736	" at the Ford of Arthursleigh	1,830
Ford at Cox's River, Vale of Clywd	2,052	" at Detley Crossing Place	1,752
Fish River, on the road to Bathurst	3,220	Yass River Rivulet	1,311
Military Station, Blue Mountains	3,010	Nackie Nackie Hill	2,242
Badger Brush Ridge	3,290	Mount Kosciuszko, Australian Alps	6,500
Police Station, Dividing Range Bathurst	2,910	Mount Dargal	5,490
Cox's River, before reaching Blaxland's	2,266	Mount Pinnabar	4,100
Mount Blaxland [the highest summit]	3,256	Cowrang Creek	1,350
Jock's Bridge	2,921	Dividing Range in the Omeo County	3,800
Hill beyond Jock's Bridge	3,496	Source of the Mitta-Mitta River	1,850
Bathurst Town	2,310	Lake Omeo	3,100
Summer Hill, Frederick Valley	3,010	Second branch of Mitta-Mitta River	1,900
Boree Plains	1,560	The average height of the flats in Gipps' Land	210
Mount Canoblas, Wellington County	4,610	Range between Gipps' Land and Port Western	2,510
Macquarie River, at Wellington	1,439	Mount Wilson, Wilson's Promontory	2,350
Captain Ryan's, Boree Station	1,992	Dutztong, a sheep station of P. King, Esq., lat. 35° 27', long. 147° 53'	1,844
Molongorang (Mr. Passmore's)	2,062	Ellerslie, sheep station	1,266
Heiregal (Mr. Maxwell's Station)	1,616		

RIVERS, CREEKS, AND HARBOURS.—The rivers of Australia, not even excepting the Murray, bear a very much smaller proportion to the size of that continent, and occupy a far less prominent geographical position than do those of any other country of similar extent, and they afford very limited communication between the coast and the interior. Of them, therefore, and for somewhat similar reasons of the creeks, lakes, and lagoons of New South Wales, a brief notice may suffice, especially as many of them have been already alluded to in the section on inland exploration; but this notice it may be well to preface

with the warning given by captain Sturt to those of his readers not conversant with the peculiarities of Australian watercourses. "A creek," he says, "is not always an arm of the sea. The same term is used to designate a watercourse, whether large or small, in which the winter torrents may or may not have left a chain of ponds. Such a watercourse could hardly be called a river, since it only flows during heavy rains, after which it entirely depends on the character of the soil through which it runs, whether any water remains in it or not." "A lagoon is a shallow lake, it generally constitutes the

back water of some river, and is speedily dried up."

The number of constantly flowing streams in New South Wales is very limited, but an all-wise Providence has in a most remarkable manner provided a remedy for this deficiency by the peculiar construction of the channels of the greater part of the rivers, which form a succession of deep reservoirs, being in fact a connected series of ponds or water-holes. This wonderful provision for the exigencies of animal existence is rendered the more striking by the character of the Australian aborigines, whose want of constructive ability manifested in so many respects, clearly indicates their incapacity of discovering a means by which the superabundance of one season might be made to supply the insufficiency of another.

The first stream of importance explored by the early settlers at Sydney Cove, and which, until the discovery of the Murray, was the broadest fresh water stream known in Australia, was named by governor Phillip the Hawkesbury. Its course, when traced inland from Broken Bay, where it disembogues, becomes extremely tortuous, the distance of Windsor (a town built upon it,) being not more than thirty-five miles from the sea in a direct line, but by the windings of the river, 140 miles; the rise of tide is about four feet, and the water fresh forty miles below Windsor, at which place it is of considerable size, and navigable for vessels of 100 tons for four miles above the town. A little higher up it is joined by a mountain stream called the Grose, which issues from a remarkable cleft in the Blue Mountains, in the vicinity of the pretty town of Richmond, about forty miles from Sydney. The Hawkesbury, while flowing along the base of these mountains, is fed by numerous tributary torrents descending from narrow gorges, which after heavy rains cause it frequently to overflow its banks as it approaches the sea; in one instance it rose, near the town of Windsor, ninety-three feet above its ordinary level.* Broken Bay extends inland to a considerable distance, and is divided into many creeks and inlets, forming excellent havens, two of which, according to Phillip, are capable of containing the whole British navy. The Hawkesbury, previous to its receiving the Grose, is called the Nepean, or rather it is a continuation of that river, which, rising in Camden country, forms the boundary for a while between that county

and Cumberland, and subsequently between the counties of Cumberland and Cook. The scenery along the Nepean is magnificent; immediately beside it the Blue Mountains rise in frowning majesty, to a perpendicular height of nearly 3,000 feet, while along the fertile borders of the stream are fields of wheat, barley, maize, bran, peas, clover, &c., to the extent of several thousand acres. The point at which I first saw the Nepean river, was at the estate of Mr. S. Terry, the wealthy emancipist previously mentioned. As far as the eye could reach, nothing could be seen but the yellow waving corn, save when the view was bounded by the gigantic buttresses of the mountain barrier. I never beheld a finer farm in Europe than Mr. Terry's; and while enjoying the cheerful scene, I could not but feel proud of belonging to a nation, who through her outcast and erring children had extracted from the stubborn soil of a distant land such admirable results. The Macdonald and the Colo are the chief tributaries of the Hawkesbury, and the Warragamba of the Nepean. The Warragamba (a continuation of the Wollondilly) receives the Cox twenty miles to the southward of Emu Plains. The Cox pursues its course through a wild region, and in parts could be traced only by scrambling on foot, or by following out the several extremities of the mountain ranges which overhang its rocky channel.

Hunter River disembogues in the sea at the harbour of Newcastle, Port Hunter, a safe haven, sufficiently capacious for vessels of 300 tons burthen; fifty-nine miles N. 22° E., from the entrance of Port Jackson. The Hunter, formerly called the Coal River, is formed by several streams flowing from the Blue Mountains, and is navigable for fifty miles from Newcastle, by small craft of thirty to forty tons burthen. Beyond this distance there are several shallows, which only admit the passage of boats over them. There are three branches to the Hunter, called the Upper, the Lower, and the Middle; the two former are navigable for boats for about 120 miles, and the latter for upwards of 200 miles, but the branches are all liable to sudden and terrific inundations, owing to the rapid descent of torrents from the Blue Mountains. In consequence of the fertility of the soil along the Hunter, and the extent of water communication which exists, this district is one of the finest in the colony. A large number of respectable farms skirt the banks of the river and the country

* Wentworth's *Statistical Account of N. S. Wales.*

wears an aspect resembling the rich pastoral scenery of Devonshire. The valley of the Wollombi extends in a northerly direction towards Hunter's River, for about thirty miles. It is bounded on either side by mountain ranges, covered with timber to their summits. Numerous valleys, or, as the settlers call them, *arms*, branch off on either side; some stretching twenty or thirty miles among the mountains, all abounding in excellent pasture, and affording sustenance to numerous flocks of sheep, and herds of cattle that depasture amidst this wild and beautiful scenery.

Port Stephens, situated about 100 miles from Jackson, is a fine harbour; the narrow entrance between rocky headlands, opens into an expanse about two miles in length; then narrowing, forms a channel, which admits vessels of considerable burthen, to a second bay perfectly land-locked. The little river Karuah, which falls into it, affords a means of communication some distance into the interior; it is said to be navigable as far as Booral, which is twenty miles from Port Stephens. The Myall, a still smaller stream, which has its embouche in Port Stephens, opens into some extensive lakes, situate along the coast, separated only by a narrow strip of land from the ocean.

Manning River forms the northern boundary of Gloucester county; it disembogues into the ocean by two mouths, called Farquhar and Harrington inlets, which are divided by a singularly-shaped island, named Mitchell Island: neither of them afford more than a harbour for boats, for which, indeed, the navigation of the Manning is alone adapted. It flows from the eastern side of Liverpool range: its banks have good soil and fine scenery.

Hastings River, after a course of about 100 miles, joins the sea at Port Macquarie, about 220 miles to the north-east of Port Jackson, in $31^{\circ} 25' 45''$ S. lat., $152^{\circ} 53' 54''$ E. long. Port Macquarie is a bar harbour, with at least nine feet low water spring tides. The bar (composed of soft sand) extends for 200 yards; beyond this, the water immediately deepens to two and three fathoms; within the port, the soundings are five and six fathoms, which depth continues for nearly ten miles, when shoals confine the navigation to crafts drawing six or eight feet. That depth continues for eight miles, where the rapids commence. The source of the Hastings has been already mentioned (p. 433), on the authority of count Strzelecki; ac-

ording to Mr. Hodgkinson, it rises (in $31^{\circ} 50'$ S. lat., $151^{\circ} 50'$ E. long.), "at Mount Warragambi, one of the summits on the range which divides the basin of the Manning River from that of the MacLeay. This range branches out at Mount Warragambi, so as to form the basin of the Hastings River, which consequently does not rise in the great main chain of mountains dividing the eastern and western waters, as some authors have averred." Mr. Hodgkinson, in the interesting work from which the above observation is taken—*Australia, from Port Macquarie to Moreton Bay*—notices an error with regard to the Hastings river, made by me in a previous work, for which I cannot, at this lapse of time, at all account. He makes due and kindly allowance for errors "almost unavoidable in writing a work of such magnitude as Mr. Montgomery Martin's *History of all the British Colonies*;" but he is, perhaps, scarcely aware of the difficulty which existed at the period at which it was written (1834-5), of obtaining accurate and sufficient data concerning many of our vast possessions, and especially Australia.

The country bordering on the Hastings undulates pleasingly in hills and dales lightly clothed with good timber; to the north-east the river opens into reaches of great width and beauty. The Maria river, which empties itself into the Hastings at John's Plains, is navigable, according to Dr. Lang, for "forty miles from its mouth;" but he must mean only for small craft. The Wilson river, another tributary of the Hastings, is navigable for about twenty miles; the alluvial soil on its banks is of excellent quality, as evinced in the produce of a series of farms extending for twelve or fifteen miles in a continuous chain. A few miles to the south-east of Port Macquarie are some extensive lakes, which communicate with the ocean.

The MacLeay River falls into the sea at Trial Bay, in $34^{\circ} 40'$ S. lat. Trial Bay is a good roadstead, being completely protected from all winds but those between north and east, from which quarters the winds are seldom strong. The entrance to the river is obstructed by a bar having about eleven feet of water on it; it is described by captain King as being navigable for vessels of 300 tons to fifty-seven miles above its mouth; but Mr. Hodgkinson, when recently surveying it, found it only navigable for thirty-four miles, and so far only for vessels not exceeding sixty or seventy tons burden. The Apsley joins the MacLeay from the south-

west; above this junction the scenery is described* as assuming a grand alpine character, both rivers hurrying along rapidly descending beds, through narrow glens of frowning precipices, 3,000 feet in height, whilst the surrounding mountains frequently attain an elevation of 6,000 feet above the level of the sea. Tremendous cataracts are of continual occurrence; at one of them the whole river has a perpendicular fall of 250 feet, and after raging in a furious torrent, half foam and vapour, along a steep inclined plane, it again dashes down another perpendicular fall of 100 feet; the total descent of its waters in this short distance being probably little under 500 feet. After tracing the MacLeay upwards, through this rugged country, its bed rising rapidly to a very considerable elevation above the sea, we at length emerge on a gently rising table land. From this point to its sources, the MacLeay river changes its character, and assumes similar features to the New England streams, flowing west to join the Peel river, smaller trees sparingly scattered over pasturage of quite different aspect to that bordering the lower MacLeay, being here observable.

The Nambucca River, whose mouth is about eleven miles to the north of the MacLeay, has its entrance obstructed by a rocky impassable bar; it is formed by several mountain streams rising in bushy gullies, and its banks consist of mangroves, tea-tree swamps, dense forest and cedar brushes. "The nettle-tree," (says Mr. Hodgkinson,) "attains a very large size at the MacLeay and Nambucca rivers, being often six feet in diameter, and of a corresponding height; its wood is very soft and spongy, and its leaves, which are of great size, resemble in shape those of the mulberry, and, at the same time, possess the bright green velvet appearance of the geranium leaf. The slightest touch of one of these leaves occasions a most acute stinging pain; but horses suffer infinitely worse than men, from contact with the leaves of the nettle-tree, as their skin rises in large blisters, and great temporary constitutional derangement seems to take place."

The Coohalli, a small stream which filters through a sandbank to the sea, about six miles north of the embouchure of the Nambucca, is deserving of mention, from its being noted by Mr. Hodgkinson as the furthest point south, and, consequently, the

* Hodgkinson's *Australia from Port Macquarie to Morerton Bay*.

nearest point to Sydney, at which he found the magnificent variety of pine generally known as the "Moreton Bay pine." "These trees," he says, "occur here all of a sudden, in considerable numbers, and of great size and altitude, although I have not detected one single individual pine in any of the brushes of the Nambucca, MacLeay, Hastings, or Manning rivers, or, indeed, anywhere south of this point."

Bellengen River was discovered by a party of sawyers, in 1841. It is a fresh-water stream, about the size of the Hastings; but, notwithstanding the luxuriant vegetation on its banks, is rendered unavailable for grazing purposes by the precipitous heights which hem in and contract its bed. The sawyers, however, must have considered their discovery a very fortunate one, for Mr. Hodgkinson, who explored it in 1842, speaks very highly of the quality of the timber growing on its banks, and those of its tributary, the Odalberree, the trunks of the cedar and rosewood trees being often six feet in diameter and ninety feet high, before they throw out a single branch.

Clarence River disembogues in Shoal Bay, in 29° 30', where its entrance is obstructed by a bar having about eleven feet of water on it. The Clarence is remarkable for its great breadth and large volume of water (compared with other rivers of Australia), and considering the shortness of its course. Its reaches are said to be longer and wider than those of any stream on the coast of Australia, and navigable for large steamers to a considerable distance up the river; the Clarence being navigable, for some craft, for nearly ninety miles. A few miles above its mouth is an island, containing an area of above 1,500 acres, and many smaller ones occur higher up the river. The country on its banks available for grazing purposes being of considerable extent and excellent quality, a great number of squatters have formed stations upon it. The Clarence rises in the dividing range, and receives several large tributaries, one of which, the Ora-Ora, rises in the lofty mountains which divide the basin of the Clarence from the Belleggen.

Richmond River (still tracing the coast in a northerly direction,) falls into the sea near Lennox Head, in 28° 55' S. lat. The bar at its mouth has from eight to ten feet of water upon it, above which the river is navigable for small craft for about thirty miles. Its sources are not yet ascertained,

but its main stream appears to rise in the dividing range, near Wilson's Peak and Coke's Head. There is much good available land on its banks, and some fine cedar.

Tweed River, or, rather, *creek*, for it is but a large salt-water inlet, yet its extensive reaches are navigable for large boats to a distance of upwards of forty miles from its bar, which has been crossed by a schooner of sixty tons burden.

Brisbane River.—Proceeding along the coast, we arrive at Moreton Bay, which is sheltered by two narrow islands of from fifteen to twenty miles in length, called Moreton, and Stradbroke Island. The bay is said to be sixty miles in extent; it receives several streams, the most important of which are the Logan, the Brisbane, and the Pumicestone river. The Brisbane disembogues in 27° 1' S. lat., 153° 26' E. long. The bar at its mouth has eighteen feet of water on it. This river was discovered, in 1823, by captain Oxley, who, in his official despatch, makes the following remarks concerning it:—

“When examining Moreton Bay, we had the satisfaction to find the tide sweeping up a considerable inlet, between the first mangrove island and the main land. The muddiness and taste of the water, together with the abundance of fresh-water molluscæ, assured us we were entering a large river; and a few hours ended our anxiety on this point by the water becoming perfectly fresh, while no diminution had taken place in the size of the river after passing what I called Sea Reach. At sunset we had proceeded about twenty miles up the river. The scenery was peculiarly beautiful; the country along the banks alternately hilly and level, but not flooded; the soil of the finest description of brushwood land, on which grew timber of great magnitude, and of various species, some of which were quite unknown to us. Among others, a magnificent species of pine was in great abundance. The timber on the hills was also good; and to the south-east, a little distance from the river, were several large brushes or forests of the *cupressus Australis*, of very large size. Up to this point the river was navigable for vessels not drawing more than sixteen feet water. The tide rose about five feet, being the same as at the entrance. We proceeded about thirty miles further, no diminution having taken place either in the breadth or depth of the river, excepting in one place for the extent of thirty yards, where a ridge of detached rocks extended across the river, not having more than twelve feet upon them at high water. From this point to Termination Hill the river continued of nearly uniform size. The tide ascends daily fifty miles from the mouth of the Brisbane, flowing also up the Bremer, the depth of whose channel it augments by eight or more feet. The country on either side is of very superior description, and equally well adapted for cultivation or grazing, the timber being abundant, and fit for all the purposes of domestic use or exportation. The pine trees, should they prove of good quality, are of a scantling sufficient for

the largest ships: some measured upwards of thirty inches in diameter, and from fifty to eighty feet without a branch.”

Subsequent examination has verified, to the fullest degree, this favourable account; and the capabilities of the valuable and beautiful tract of country, traversed by the Brisbane and its tributaries, even surpass his expectations in their capacity of supporting a numerous population, and of producing, in abundance, the tropical products of sugar, cotton, coffee, silk, tobacco, &c. In a subsequent part of his despatch, captain Oxley thus expresses himself concerning the source of the new-found stream:—“A consideration of all the circumstances connected with the appearance of the river, justifies me in entertaining a strong belief that the sources of this river will not be found in a mountainous country. Most probably it issues from some large collection of interior waters, the reservoir of those streams crossed by me during an expedition of discovery in 1818,” (see p. 383), “and which had a northerly course. Whatever may be its origin, it is by far the largest fresh-water river on the east coast of New South Wales.” Captain Oxley's surmise concerning the sources of the Brisbane, and the length of its course, have been disproved by more recent surveys, the Brisbane having been ascertained to take its rise in the dividing range, opposite to and in a straight line only sixty miles from Moreton Bay. The width of its basin, its tortuous course, and numerous tributaries, however, soon render it an important stream. It is joined on the south side by the Bremer river rising near Mount Frazer, on whose banks coal and limestone are found in large quantities.

Wide Bay is a good port, having in its entrance a channel of not less than three fathoms deep: it communicates with Hervey Bay, thus completing the insulation of Great Sandy, or Frazer's Island, whose north-eastern extremity was named by captain Cook, Sandy Cape. Mr. R. S. Russell, who visited the bay in 1842, thus describes it:—“Frazer's Island, which forms Wide Bay, or, more properly speaking, ‘Sound,’ for it is twenty-five miles long, runs nearly parallel to the main, trending more easterly towards the northern extremity, thereby leaving a wide open entrance. At the southern extremity the island is not more than three-quarters of a mile from the main. A spit of sand comes out both from the island and from the main: but by not attempting to

run in until the round mountain, called Boppol, is well open between the two shores, the channel is clear and good with at least six fathoms water." Mr. Russell, in his account of this excursion, subsequently states that he found in the southerly part of the bay, to which his exploration was confined, innumerable shoals and islets; one large navigable river, called by the natives Monobocla, without a bar, but having at its mouth sand-banks dry at low water, which leave only a narrow channel between them. The tide flows about thirty miles up, and the river is navigable for that distance for vessels drawing eight feet; after losing the tide it soon becomes small, but can be ascended by boats for about twenty miles further. The banks are low, but generally well timbered with large trees, and ducks and black swans abound. To the country near the head of the boat navigation of this stream the natives resort in large numbers, to feed on the fruit of the Bunya-Bunya tree, a species of pine, growing, according to Mr. Russell, as straight as an arrow to the height of from 100 to 300 feet. It bears a large cone full of nuts, which are excellent when roasted, but taste, when raw, like the horse-chestnut.*

Hervey Bay is fifty miles wide, at its mouth, and extends inland, in a southerly direction, for about the same distance.

Bustard Bay, in $24^{\circ} 4' S.$ lat. and $208^{\circ} 18' E.$ long., was so named by captain Cook, in honour of a bird of the bustard species, about the size of a turkey, caught here, which he speaks of as the best bird he had eaten since he left England.

Boyne River, or rather, the upper portion of that stream, was discovered by Mr. R. S. Russell, in his second exploring expedition of 1842, but only partially explored. The

* Among a native tribe on this river, Mr. Russell found a white man, a convict named Davis, who had absconded from the penal settlement fourteen years before, and had never since been heard of. He had been transported when only eleven years of age, and had run away two years after; he appeared at first to have almost entirely forgotten his own language, but soon recovering his knowledge of it, he was persuaded to return to Moreton Bay. The natives shewed great sorrow at parting from him, and followed him a long way down the banks of the river with loud lamentations. The statement made by Davis concerning the aborigines was to the following effect:—That they supposed all their own men who had died or been killed in battle to become white men, because, before eating them (for they are cannibals) they draw the skin off, and wash the flesh before cutting it up. When flayed in this way the flesh of a black man is perfectly white. They believe he becomes a white ghost in another country beyond the sea. Accord-

ingly, when they first heard of whites, they supposed them to be the ghosts of their own dead come back; and if any one traced a fancied resemblance in a white man to a deceased relation or friend, he took him under his protection, in the full persuasion that it was his son, brother, or whoever it might be, returned to him. In such a case a white man has nothing to fear from the tribe to which his patron belongs. They will kill a fat white man sometimes, to eat, if he is not owned by any of the tribe as some ghost of a returned relation, but they will not skin him as they suppose him to have been already skinned when eaten as a black. In cutting a man up they open his back, and having extracted the bones from the legs and arms, these are eaten by the men as being the tit bits. They then cut the head open and pick it; the viscera and heart are given to their gins (wives), whom they use worse than dogs.—See *Journal of Royal Geographical Society*, vol. xv. [A description of the aborigines is given in the Supplement.]

Port Curtis, into which a river called the Boyne, and considered by Mr. Russell identical with that above described, disembogues, is in $23^{\circ} 51' 45'' S.$ lat., and $151^{\circ} 24' E.$ long. (ten degrees east of Sydney); it is reported to be an excellent harbour, which, through the passage of entrance recently discovered by captain Stanley, is of very easy access for shipping of any burthen. The coast line from this point has been described in a previous section; we therefore return to Broken Bay, premising, however, that the rivers of New South Wales, south of Sydney, are generally inferior to

ingly, when they first heard of whites, they supposed them to be the ghosts of their own dead come back; and if any one traced a fancied resemblance in a white man to a deceased relation or friend, he took him under his protection, in the full persuasion that it was his son, brother, or whoever it might be, returned to him. In such a case a white man has nothing to fear from the tribe to which his patron belongs. They will kill a fat white man sometimes, to eat, if he is not owned by any of the tribe as some ghost of a returned relation, but they will not skin him as they suppose him to have been already skinned when eaten as a black. In cutting a man up they open his back, and having extracted the bones from the legs and arms, these are eaten by the men as being the tit bits. They then cut the head open and pick it; the viscera and heart are given to their gins (wives), whom they use worse than dogs.—See *Journal of Royal Geographical Society*, vol. xv. [A description of the aborigines is given in the Supplement.]

those on the north, in both length of course and volume of water; and, therefore, few of them need any especial notice, their names and situations being sufficiently delineated on the map.

Paramatta River is little more than an extension of Port Jackson, but very useful as affording the means of water communication between Sydney and Paramatta, being navigable for that distance (eighteen miles) by second-class steam-boats and small craft. Port Jackson has been already mentioned, and also Botany Bay; the north point of entrance to the latter is formed by Cape Banks, and the south by Cape Solander, in $34^{\circ} 0' 45''$ S. lat., $151^{\circ} 15' 50''$ E. long. A plate fixed in the rock of this latter cape, records the first visit of captain Cook.

George River disembogues in Botany Bay, after collecting chiefly all the waters to the eastward, between the Hawkesbury and the sea. Small vessels ascend the river as far as Liverpool, which, following the windings of the stream, is about twenty-four miles from Botany Bay, though, in a direct line, only half that distance; the water near Liverpool is stated by Mr. Wentworth to be occasionally brackish, during the long summer droughts.

Port Hacking, as far as I am aware, has not been specially surveyed; we gather from Flinders' brief account, that it has three-and-a-half fathoms in the entrance; that it divides into three branches, and carries from three to five fathoms water in the middle one, at the distance of two miles from the sea.

Red Point, further to the southward, in $34^{\circ} 29'$ S. lat., is a remarkable headland situated on the north-east side of the peninsula which incloses Lake Illawarra on the north. It acquired its name from the dull red colour of its cliffs; on it are four hillocks, which present the form of a double side-saddle; it may also be recognised by a strangely shaped hill, about eight miles from it, named Hat hill, by captain Cook. There are two rocky islands off the point, and at a short distance to the northward, another group, called Martin's Isles. Illawarra lake is a large salt-water lake communicating with the sea.

Point Bass is the next marked feature on the coast, to the south of which *Shoalhaven River* falls into the sea, between the counties of Camden and St. Vincent. This stream is navigable for about twenty miles, for vessels of seventy or eighty tons burthen.* Its

* Wentworth's *New South Wales*.

channel is a ravine, about 1,500 feet below the ordinary level of the country between it and the Wollondilly. A singular grandeur is imparted to the scenery of the Shoalhaven, by precipices, consisting, at one part, of limestone of a dark grey colour, and containing very imperfect fragments of shells—and at another, of granite.

Among the peculiar features of these lofty river banks are many remarkable hollows, called "hoppers," by the country people, from the water sinking into them, as grain subsides in the hopper of a mill. The country on the upper part of the Shoalhaven river comprises much good land; the river flows there nearly on a level with the surface, and resembles an English stream; the temperature, at the elevation of about 2,000 feet above the sea, being also so low, in summer, that potatoes and gooseberries, for both of which the climate of Sydney is too hot, grow there luxuriantly.†

About two miles from the mouth of this river is a small port, called by the same name (Shoalhaven), which it well merits, the entrance being choked with sand, and the interior with banks of mud, leaving, however, a sufficient channel for boats.

Jervis Bay extends about three leagues from north to south, and nearly two in breadth. Its east side is sheltered by a peninsula, the bight behind which (named Crookhaven) is separated from the bay by an isthmus of not more than 400 yards wide. The north point of the entrance to Hervey Bay, called Point Perpendicular, is (according to lieutenant Jeffreys) in $35^{\circ} 6' 28''$ S. lat.; the south point is formed by a small low island lying contiguous to Cape George, between which there is a passage, though a very bad one. The entrance is about a mile-and-a-half, or two miles wide, with a depth of fifteen to twenty fathoms, and, within, the soundings are regular, from fourteen to ten fathoms, decreasing to eight and seven fathoms near the shore on either side. There is sufficient room for ships of any size to work in or out; but there are dangers difficult to guard against. A sunken rock lies about one and one-third mile within the north point of the entrance, and a mile distant from the shore; and (judging from the plan of Mr. Weatherall, published by the Hydrographical Office, Admiralty,) reefs seem to extend from almost all the points in the bay. The best and most con-

† Mitchell's *Expeditions into Australia*.

venient anchorage is from six to ten fathoms, under Bowen's Island.

Cape George, in $35^{\circ} 10'$ S. lat., lies to the southward of Jervis Bay; the next inlet is Sussex Haven, by which a lake with broken shores, called St. George's Basin, communicates with the sea. Still proceeding south, the next land-marks are the Pigeon-house, a peaked hill so called by captain Cook, from its resembling a square dove-house with a dome at the top, in $35^{\circ} 20' 30''$ S. lat., and the perpendicular cliffs of Point Upright, in $30^{\circ} 35'$ S. lat.

Clyde River, which is described as a fine, clear, and capacious river, with nine feet water on the bar, and deepening within to six fathoms, empties itself into *Bateman's Bay*. Lieutenant Johnson carried a depth of seven to four fathoms upwards of twenty miles within the bay. The bay is about six miles wide, and contains several little islands, behind which small vessels frequently take anchor.

Moruya River falls into the sea at *Moruya* or *Broulé Bay*, to the south-east of which is Cape Dromedary, a projecting headland, with a double mountain over it of considerable elevation, which, it is said, may be seen at the distance of twenty leagues. The Cape is in $36^{\circ} 18'$ S. lat., and about six miles to the eastward of it lies Montague Island, of nearly two miles in length from north to south, with a depth of twelve fathoms near its west side, where ships may anchor, but on a rocky bottom. There are some rocks near the south-west end of the island. All the coast between this promontory and Cape Howe may be safely approached, to a reasonable distance, as soundings extend to the distance of three or four leagues.

Barmouth Harbour is thus mentioned by captain Flinders:—"A strong wind, which burst from the south, obliged Mr. Bass (in a whale boat), to run for a gap in the land, which had just before been noticed. Here, on a little beach, at the mouth of an inlet, across which the sea was breaking, the boat was hauled up for the night. Next morning, the inlet being free from breakers, he entered the prettiest little model of a harbour he had ever seen. Unfortunately, it is but a model; for although the shelter within be complete for small craft, yet the depth over the bar is too small even for boats, except at high water, when there is eight or nine feet." The intermediate land between Barmouth Harbour and Twofold Bay, a

distance of about seven leagues, is of moderate elevation, bending a little to the eastward, with three islands contiguous to it.

"*Twofold Bay*," says captain Flinders, "is not of itself worthy of any particular interest, but as nothing larger than boats can find shelter in any other part of this coast, from Corner Inlet, or from Furnaux's Isles to Jervis Bay, it thereby becomes important to whalers and other ships passing along this coast." The shores of the bay are of moderate elevation, and consist of steep heads, rocky points, and sandy beaches. Snug Cove is situated in the north-west angle of the bay in $37^{\circ} 4'$ S. lat., $150^{\circ} 3'$ E. long. "Wood, in abundance," says Flinders, "can be procured on every side of the bay; but there are only two places where fresh water was found, and that not very good. One of these was a swampy pond upon the low neck near Snug Cove, where casks might be filled without much difficulty; the other is near the inferior anchorage on the south side of the bay." To the south-west of Twofold Bay lies *Green Cape*, which is smooth and sloping, with a deep bight or bay to the southward; the coast from thence to Cape Howe is bold and mostly rocky.

Cape Howe, the south-east point of Australia, and the southern limit of the coastline of New South Wales, is a low point of rocks and sand, with a small island close to it. It may be easily recognized by the trending of the coast, which is nearly west on one side and north on the other, and also by some round hills in the vicinity.

The westerly or inland rivers of New South Wales, occupied a considerable portion of the section on internal exploration. We have already seen that after the successful enterprise of Messrs. Blaxland, Wentworth, and Lawson had found a pass over the Blue Mountains, several streams were discovered flowing in a westerly direction, of which two of the most considerable, the Lachlan and Macquarie, were traced in their different courses, by captain Oxley, to their apparent termination in reedy and impassable morasses (page 382,) in which, however, they are not finally lost, it having been subsequently ascertained that the waters of the marshes in which the Lachlan is for a time lost, reunite in one channel and flow into the Murrumbidgee, while those of the Macquarie are drained in a similar manner into the Darling. *Lachlan River* has its origin in the mountains bordering Argyle county, one of its most easterly sources being Derin-

gullen ponds, which arise in the southern of the three open flats of grassy land called Bredalbane Plains; thence it runs in a north-westerly direction, receiving in $33^{\circ} 5' 20''$ S. lat., $147^{\circ} 13' 10''$ E. long., a tributary from the north-east, called Goobang Creek, which has its sources in the ravines between Harvey's and Croker's ranges.* The Lachlan, after the junction of the Goobang, changes its direction from north-west to south-west, and a creek called by the natives "Cudjallagong" leaves the river and conveys its waters almost straight back from their course to supply Regent's Lake, which, when discovered by Oxley, in 1817, was described by him as a "noble lake;" but when visited by Mitchell, in 1836, appeared for the most part a plain covered with luxuriant grass, with some water lodged on the most eastern part, but in no place more than a foot deep. Innumerable ducks had taken refuge there, and also a great number of black swans and pelicans, all standing high upon their legs, above the shallow water. Unlike the water of Lake George, which is brackish, that of Regent's Lake was perfectly sweet even in its shallow state. It abounds with large fresh-water mussel; on its northern margin, and a good way within the line of the water, stood dead trees of a full-grown size, apparently killed by too much water, too plainly shewing, like the trees similarly situated in Lake George and Lake Bathurst, to what long periods the extremes of drought and moisture may extend in this singular country. That the lake is sometimes a splendid sheet of water was obvious enough in the line of beach along the shores. At two different places the banks are so low that in high floods the water must flow over from the lake, and probably thus supplies Campbell's Lake, and another to the northward of Regent's Lake, named "Goorongully." Following the course of the Lachlan from Cudjallagong creek, we arrive at the farthest spot to which Oxley traced it, (according to Mitchell in $33^{\circ} 41' 10''$ S. lat., $145^{\circ} 9'$ E. long. ;) but instead of terminating there, its banks at fifty miles below this spot are backed on both sides by rising ground until it turns finally southward towards the Murrumbidgee, which it joins in $34^{\circ} 25'$ S. lat., and $144^{\circ} 3'$ E. long. Sir Thomas Mitchell makes the following observations on the oc-

casion of his exploring this river in 1836:—"I beheld in the Lachlan all the features of the Darling, but on a somewhat smaller scale. The same sort of large gum trees, steep, soft, muddy banks; a margin and an outer bank. But its waters were gone, with the exception of a few small ponds, which still remained in the deepest parts of its bed. Such was now the state of that river down which my predecessor's boats had floated. I had, during the last winter, drawn my whale-boats 1,600 miles over land, without finding a river where I could use them; whereas Mr. Oxley had twice retired by nearly the same routes, and in the same season of the year, from supposed inland seas!" The Lachlan, therefore, although occasionally in flood, cannot be depended upon as a navigable river.

Murrumbidgee River rises in the western ridge of mountains situated to the southward of the parallel of 35° , and under the meridian of 149° , at a distance of about eighty miles from the sea, and after receiving Yass river, the Coodrabbidgee, the Tumut, or Doomot, and some other minor streams, which fall into it at an early stage of its progress, pursues a long and tortuous course for upwards of 300 statute miles, without deriving the slightest increase from the country it waters. As its course extends to the westward of the meridian 147° , the river falls on a low level; the hills of sandstone rock, which give a picturesque appearance to the lands on its banks, higher up the stream, disappear, and flats of alluvial deposit occupy their place. From the account of Sturt in 1829-30, and of Mitchell in 1836, we gather that the Murrumbidgee is, to a certain extent, for a very considerable distance, a navigable river. The former authority, speaking of it at the end of the year 1829, describes it, not far from the junction of the Tumut, as "a stream whose current it would have been difficult to breast, and whose waters, foaming among rocks or circling in eddies, gave early promise of a reckless course. It must have been somewhat below its ordinary level, and averaged a breadth of about eighty feet." Lower down it "expanded into a fretful rapid, but it was sufficiently shallow to admit of taking the drays over, without the trouble of unloading them." Still lower, it increased in

* It is rather remarkable that captain Oxley, when exploring the Lachlan, should have omitted to survey that portion of it where it is joined by the Goobang; especially as, according to Sir F. L. Mitchell, it is

the floods of this stream which inundate the country below Mount Cunningham, and were the sole cause of the swampy appearance which captain Oxley observed to the westward

size, but preserved the characteristics of a mountain stream, having alternate rapids and deep pools, being in many places encumbered with fallen timber, and generally running over a shingly bed. "Below Pontebadgery it expands. Further on, it had been swollen considerably by rains, and rolled along at the rate of three miles an hour, preserving a medium width of 150 feet." Captain Sturt subsequently says—"During the night it fell considerably, but it still poured along a vast body of water, possessing a strong current. It kept a very uniform breadth of from 150 to 170 feet, and a depth of from four to twenty feet. Its channel, though occasionally much encumbered with fallen timber, was large enough to contain twice the volume of water then in it." The current was so strong, as to carry the "swimmers" out of their straight course. In January, 1830, captain Sturt embarked in his boats, about fifteen miles above the junction with the Lachlan. He proceeded from twenty-eight to thirty miles by the river's windings, but a little beyond this, one of the boats struck on a log, and went down in twelve feet water. Larger boats could have navigated the stream, which was deep and strong. The channel, however, contracted lower down, and became filled with immense trees, swept there by floods. The whale-boat again struck on a log; and, not long after, upon a line of sunken rocks of ironstone. In longitude 143° , a running stream, the first for 340 miles, joined the river, which, shortly after, had a breadth of 200 feet, with an average depth of from twelve to twenty feet; but several rapids occurred, down which the boats were hurried with great velocity. The channel, after this, contracted, and became blocked up with large trees, which, with an increasing current, rendered the navigation perplexing and dangerous. The trees were so numerous, that the passage could hardly be effected. The voyagers were carried, at a fearful rate, amongst these trees by a tortuous current, till they were hurried into a broad and noble river—this was the Murray. The breadth of the Murrumbidgee, at the junction of the two streams, is only fifty feet.

Sir Thomas Mitchell describes the Murrumbidgee as "an important river," and speaks of its full stream, its water-worn and lightly timbered banks, and the firm and accessible nature of its gullies, as quite the reverse of the interior rivers in general, especially the Darling; and states that above

its junction with the Murray, at Weyeba (in $34^{\circ} 21' 34''$ S. lat., $143^{\circ} 56' 27''$ E. long.,) it was fifty yards wide, with banks eleven feet high; while the noble Murray (whose description forms a portion of the topography of South Australia, its embouche being in that province) below the junction was a magnificent stream 165 feet broad, with banks twenty-five feet high. The *Sydney Herald*, in an able article, entitled, "Are the interior waters of Australia navigable?" has the following remarks concerning the two rivers we have just examined:—"The Lachlan is clearly not navigable; the Murrumbidgee, nearly up to the mountains, is; but there are considerable dangers from snags, and occasional rapids and shoals. But, perhaps, vessels purposely constructed of small draught, and carefully manned, might be employed, except in seasons of extreme drought. And if so, this river alone, offers full 400 miles of tortuous navigation, extending through at least 300 miles of direct distance." Much of the land traversed by the Murrumbidgee is of excellent quality, and adapted for the support of civilized man; its spontaneous productions long formed the chief food of its native inhabitants, and notwithstanding the great floods to which this river is subject, and the serious injury thereby inflicted on the commencing townships laid out on its banks, the locality is a favourite one, and is being rapidly occupied, especially by squatters.

Darling River, whose basin receives so large a portion of the western waters of New South Wales, is unfortunately not navigable for commercial purposes. Its tributaries, the Karaula or Dumaresq, the Nammoy, and Gwydir or Kindur, are beautiful mountain streams which rise in the hilly country behind Moreton Bay, in 27° S. lat., 152° E. long. Above the junction of the Gwydir, which is in $29^{\circ} 30' 27''$ S. lat., $148^{\circ} 13' 20''$ E. long., the Darling is a noble piece of water, and is thus mentioned by Sir T. L. Mitchell, in February, 1832:—"I now overlooked, from a bank seventy feet high, a river as wide as the Thames at Putney, on which the goodly waters, perfectly free from fallen timber, danced in full liberty; a singular-looking diving bird, carrying only its head above water, gave a novel appearance to this copious reservoir, and there was a rich alluvial flat on the opposite bank." This breadth and magnitude did not however continue; a rocky dyke traversed the river, and occasioned a slight fall, after which the Darling lost the imposing appear-

ance it had worn for a brief period, and though soon joined by the meandering Gwydir, did not resume it. The steep banks of this latter stream are lined by eucalypti (blue gum trees) of enormous size, in whose thick foliage white cockatoos abound; many dead trees encumber the channel. The average breadth of the water (in 1832) was forty-five yards; the breadth from bank to bank, seventy-five yards; the perpendicular height of these banks above the water, twenty-seven feet.

The *Nammoy* joins the Darling below the junction of the Gwydir. In its channel all the waters of the Peel, Mulnerindie, and Conadilly unite. "This stream," says Sir Thomas Mitchell, "having received the Conadilly from the left bank, had here an important appearance; the breadth of the water was 100 feet, its mean depth nearly eleven feet nine inches, and the height of the banks above the water, thirty-seven feet." The course of the Mulnerindie, from the junction of the Peel to that of the Conadilly, is somewhat to the southward of west. Below the junction of the Conadilly, the well-known native name is the Nammoy, which pursues a south-west course. The Castlereagh, known to the natives as the Barron, joins the Darling about fifty miles beyond the junction of the Nammoy; and below this, on the same side, the attenuated channel of the Macquarie, which was found in 1846 (a season of extreme drought) to be continuous in muddy ponds throughout the marshes, unites with that of the Darling (see p. 391).

Macquarie River is formed by the junction of the *Fish* and *Campbell rivers*, which issue from the Blue Mountains, and unite at the point of division between the counties of Bathurst, Westmoreland, and Roxburgh. The Macquarie takes a winding course through the plains to the north-west; in some places it is deep, broad, and navigable for large boats; in others rapid and obstructed by falls. In about 32° 30' S. lat. it is still from twenty to sixty yards wide, and twenty feet deep, with a current of about a mile and-a-half an hour. The low land in which this river was lost by Oxley, has been already described (pp. 382—391). According to Mitchell, the surplus waters of the Macquarie are conveyed to the Darling by Duck Creek, a channel altogether to the westward of these marshes. The *River Bell* or *Molong* is one of the tributaries of the Macquarie, near Wellington Valley, about 170 miles west of Newcastle; another, named

the Cudgugeeng, is distant about fifty miles from Bathurst. Below the junction of the Macquarie with the Darling, and on its opposite bank, the *Culgøa* joins the latter river. The *Culgøa* is a branch of the Balonne (p. 392), and is chiefly characterized by the luxuriant grass on its banks, the mimosa near the bed of the current, and much sand. The Balonne, with which we are newly and imperfectly acquainted, is divided by the *Culgøa* into Upper and Lower. According to Sir Thomas Mitchell, the Upper Balonne, with majestic trees, and banks grassed to the water's edge, has some noble reaches, one of which, in 28° 13' 34" S. lat., contains a large body of permanent water. Several spacious lagoons are supplied by floods in the Balonne. One of these, named by Mitchell, Lake Parachute, is described by him as an "immense sheet of water, with islands in it; and ducks, pelicans, &c. in abundance." In 27° 56' 12" S. lat., little water was found in the bed of the river, but long islands of sand, and water-worn banks, with sloping grassy bergs behind; for the next few miles, in a north-westerly direction, the scenery was wild and grand; masses of rock, lofty trees, shining sands, and patches of water, indiscriminately mingled, afforded evidence of the powerful current that sometimes moved there and overwhelmed all. The *Condamine* is one of the principal heads of the Balonne. Mitchell, in relating his expedition of 1846, says, "I did not ascertain satisfactorily the point of junction of the Condamine with the Balonne, as what I saw in 148° 55' E. long., 27° 47' 57" S. lat., might have been only an ana-branch. The chief source of the Condamine is a stream which rises in the dividing range, about ten miles south of Cunningham Gap; after an irregular course, during which (we learn from the Hon. W. Wrottesley) it is joined by several tributaries—the principal one from Herries' Range—it empties itself into a lagoon having no apparent outlet, and which lies in a direct distance of about sixty miles from its head. He states that "as far as he knows the river, it is a chain of ponds and reaches, through which there is a perceptible current; the ponds are separated from each other by necks of land ranging from a few yards to miles in length, and beneath which the water forces its way. The reaches are generally deep, with high reeds fringing the edges of their banks. The waters of the Condamine are clear and pure to the taste; but more to the south-

ward the western rivers are often brackish. In 1841, the Messrs. Russell set out on an exploratory expedition, determined if possible to trace the reappearance of the Condamine, after losing itself in the lagoon, being persuaded that as the latter had no visible outlet for the waters it received, they must escape by some subterraneous channel, and might somewhere be found to reappear upon the surface; having therefore followed the lagoon, which is seven miles in length, to its furthest extremity, they shaped their course from thence in a direction, as nearly as they could judge, the same as the river had held before it fell into the lagoon. At the end of one day's journey they came upon a small gully, which widened until it broke into a deep, rocky river-bed, on both banks of which was a fine, open grazing country; that on the west side being undulating though not hilly, that on the east, flat and rich. "This river," says Mr. Russell, "is a very fine one for this country, its direction is first north-west and then more northerly, of course not running except in floods, but having beautiful long reaches, with deep water, and fine large lagoons branching out of it. There is plenty of the best kind of timber; iron-bark, blood-wood, pine, swamp-oak, and stringy-bark." The Narran, a branch of the Minor Balonne, (see pp. 391, 392,) terminates in a swamp. The banks of the Narran are distinguished by a belt of the *polygonum junceum*, about 400 or 500 yards wide, growing between the immediate margin and the grassy plains. Here, as on the banks of the Darling, heaps of the red-stalked coral-like plant are found. The seed therefrom is black and small, resembling fine gunpowder when shaken out, but sweet and pleasant to the taste, possessing a nutty flavour; it is collected by the natives, and made into a paste. Sir T. L. Mitchell, speaking of this river, says—

"The Narran seems a wonderful provision of nature for the supply and retention of water in a dry and parched country. The division of the main river into others already mentioned is no less so—irrigating thus from one principal channel, extensive regions of rich earth beyond the Darling, while the surplus, or overflow, instead of passing, as in common cases to the sea, is received in the deep channel of the Narran, and thereby conducted to that extensive reservoir where, on rock or stiff clay, and under ever-verdant polygonum, it furnishes an inexhaustible supply for the support of animal life."

This tendency to form ana-branches (*i.e.* such as after separation unite) and a network of streams, so strikingly pointed out by Sir Thomas in the present instance, and in

that of the Macquarie and the Balonne, is to a greater or less extent remarkable in the majority of the rivers of New South Wales, whose courses it is consequently very difficult to understand without constant reference to the map, so closely connected are they with one another.

Maranoa River joins the Upper Balonne; but of this stream, as also of the *Cogoon*, *Amby*, *Belyando*, and others discovered by the indefatigable Sir Thomas Mitchell, in 1846, and of the *Dawson*, *Mackenzie*, *Suttor*, *Burdekin*, *Lynd*, and others, discovered about the same time by his distinguished contemporary, Dr. Leichardt, mention has already been made in the section on internal exploration. We are so imperfectly acquainted with their courses, that it is not possible to give a clear description of them; and for general observations or fragmentary detail but little space can now be spared. From Mitchell we learn that the bed and banks of the Maranoa are of uniform extent throughout; averaging in width about 100 feet; in height of banks, from thirty to fifty feet. The course was straight; and it seemed as if a few dams might have sufficed to render it navigable, or at least to have retained a vast supply of water; for although the bed was sandy, the bottom was rocky, and the banks consisted of stiff clay. These being covered with rich grass, and consisting of good soil, water alone was wanting to make the whole valuable. The Belyando, according to the same authority, maintains a peculiar character throughout its course, with great uniformity, even after receiving tributaries apparently larger than itself. All these lapse into the same concatenated line of ponds; at one place spreading amidst brigalow scrub, at another forming one well-defined deep channel. For the formation of ponds and the retention of water, in so dry a climate, we see here something between the ordinary character of rivers, and artificial works, which man must construct when population spreads into these regions. The fallen timber of the brigalow decays very slowly, and is not liable to be burnt, like most other dead wood in open forests, because no grass grows among it. The accumulations of dead logs become clogged with river rack and the deposit of floods; to which floods these heaps present obstructions, forcing the waters into new channels, and in their progress scooping out new ponds, and completing the embankment of dead logs; which thus form natural dams

and reservoirs, to hold, under the shade of the brigalow trees, more water for a longer time than any single river-channel could retain, however sluggish its course. Thus it was that, during a season of unusual drought, abundance of water was found in this river's course, across nearly three-and-a-half degrees of latitude. From the above observations, it is evident that the Belyando is a striking example of the general construction of Australian rivers, as noted at the commencement of this section.

To return to the Darling—after receiving the Culgōa it is joined by the *Bogan*, on the opposite bank. The chief sources of the Bogan arise in Hervey's range, and also in that much less elevated country situated between the Lachlan and the Macquarie. The lower part of this river was called "Allan's Water," by Oxley; and another portion received the name of "New Year's Creek," from Mr. Hume. Since then it has been surveyed by Mitchell, nearly from its sources to its junction with the Darling; and is considered, by him, as belonging to the basin of the Macquarie, although it never joins that river, but merely skirts the plains which may be supposed to form its original bed. Throughout its whole course of 250 miles, the left bank of the Bogan is close to low hills, while the right adjoins the plains of the Macquarie, until it finally takes a remarkable turn westward towards the Darling. A striking uniformity is manifested in this little river, no change being observable throughout its whole course in the character of its banks, or the breadth of its bed, neither are the ponds near its source less numerous, or of less magnitude, than those near its junction with the principal stream. There are few or no pebbles in its bed, and no reeds grow upon the banks, which are generally sloping and of naked earth, marked with lines of flood. Mr. Dixon estimates the velocity of the current at four miles per hour, where its course is most westerly, (the average rate of the larger rivers of Australia being, according to Mitchell, two miles an hour.) It has often second banks; and, like the Darling, a belt of dwarf eucalypti, box, or rough gum, encloses the more stately flooded gum-trees, with the shining white bark, which grow on the immediate bank of the river. It has extensive plains along the banks, the soil of which is not only much firmer, but also clothed with grass, and fringed with trees and bushes of a finer variety than those

on the Darling. Yet, in the grasses there is not the wonderful variety remarkable on the banks of that river. "Of twenty-six different kinds," says Sir T. Mitchell, "gathered by me on the Darling, I found only four of the same sorts growing on the Bogan, and not more than four other varieties throughout the whole course. It appeared that where land was best and most abundant, the grass consisted of one or two kinds only; and, on the contrary, that where the surface was nearly bare, the greatest varieties of grasses appeared, as if all struggling for existence." It was hoped that the Bogan would afford the means of access to the Darling at all times, by insuring the traveller on its banks against the chief impediments to travelling in Australia, namely—the want of water in periods of drought, and the results of its superabundance during seasons of rain; for water, it was considered, would always be found in its channel, at least in ponds, while no floods could reach the rising grounds over the left bank of the river. This expectation of the constant supply of water retained in the Bogan has not been realized: for Sir Thomas Mitchell, in December 1845, was compelled to abandon his intended route by this river, from the scarcity of this first necessity of life. About twelve miles below the junction of the Bogan with the Darling, in 145° 52' 12" E. long., 30° 7' 4" S. lat., a stockade or block-house was erected by Sir Thomas L. Mitchell, in 1835, on a spot which he named Fort Bourke, and describes as "surpassing anything he had expected to find on the Darling." It consisted of the highest ground rising gradually from the lower levels, by which the river is approached from the Bogan, to an elevated and extensive plateau, overlooking a reach of the river, a mile and-a-half in length, the hill being situated near a sharp turn at the lower end of the reach. At this turn a small water-course enters, which surrounds Fort Bourke on all sides, save that of the river; it encloses about 160 acres, containing abundance of grass. The plateau consists of rich loam; and, when first visited, was thinly wooded. Upon it were found various burying-places of the natives, who always choose the highest parts of that low country for the purpose of interment.* On the 1st June, 1835, the surveyor-general (Sir T. L. Mitchell), embarked in his whale-boats on the Darling at Fort Bourke: and the following extracts

* Mitchell's *Expeditions into Australia*.

from his journal show how little reasonable hope can be entertained of ever rendering the Darling useful as a navigable river:—"We proceeded well enough some way down the river, but at length a shallow reach first occasioned much delay, and afterwards rocks so dammed up the channel, that it was necessary to unload and draw the boats over them. Our progress was thus extremely slow, notwithstanding the activity and exertions of the men, who were constantly in the water, although a bitter cold wind blew all day. By sunset we had got over a bad place, where there was a considerable fall, when, on looking round the point, we found that the bed of the river was full of rocks to the extent of nearly a mile." (Sir Thomas explains elsewhere, that what he here terms rocks is but the ferruginous clay which fills the lowest part of the basin of this river.) "These unexpected impediments to our progress down the river determined me to return to the depôt with the boats, and afterwards to explore its course on horseback." On June 4th, he tells us, "a rocky dyke crossed the stream in a N.N.W. direction. This must," he adds, "have been another of the many impediments to our boat navigation had we proceeded by water, and from the general appearance of the river, I was satisfied that a passage with boats could not have been attempted in its present state, with any prospect of getting soon down." On June 10th he reached Sturt's furthest, below which the river formed a cataract of about two feet. On 17th June he found deep water; but, on the 19th, the river was so shallow that it seemed almost possible to step across it, and no deep reaches appeared in its bed. This was nearly 120 miles below Fort Bourke. On 24th June, there was a fall of about four feet. On 26th June, he forded the Darling: 200 miles from Fort Bourke the river had the same character as about that locality—a slow current, and an equal volume of water. Below this, on a ride of twenty-three miles, the channel became very contracted, and containing many dead trees, had altogether a diminished appearance. On the 8th July, the country was such as to remind him of the deserts in Asia or Africa. On the 11th July, he says, "I had traced its course upwards of 300 miles, through a country which did not supply a single stream, all the torrents which might descend from the sharp and naked hills being absorbed by the thirsty earth.

Over the whole of this extensive region there grew but little grass, and few trees available for any useful purpose, except varieties of acacia, a tree so peculiar to these desert interior regions, and which there seemed to be nourished only by the dews of night." And respecting this country, he adds, "We saw neither kangaroos nor emus, a sufficient proof of the barrenness of the adjacent country." The furthest point reached was near that now called Laidley's Ponds. Of this whole extent, Sir Thomas says elsewhere—"The average breadth of the river at the surface of the water, when low, is about fifty yards, but oftener less than this, and seldom more. I cannot think that the velocity of the floods in the river ever exceeds one mile per hour, but that it is, in general, much less. At this time the water actually flowing, as seen at one or two shallow places, did not exceed, in quantity, that which would be necessary to turn a mill."

The more recent accounts of captain Sturt accord only too entirely with the unfavourable remarks above quoted. In October, 1844, in his desert expedition (p. 387), he made the Darling about fifteen miles above its junction with the Murray, and found it with scarcely any water in its bed. The river, says captain Sturt, must have been in the state in which we found it for a great length of time, and I am led to infer, from the very grassy nature of its bed, that it seldom contains water to any depth, or length of time, since in such case the grass would be killed. Its flats are backed by lagoons, but they had long been dry, and the trees growing round them were either dead or dying. During a single night the Darling was converted, from an almost dry channel, into a foaming and impetuous stream, sweeping everything away on its turbid waters at the rate of three or four miles an hour, and in four days it overflowed its banks. On the return of the expedition homewards in the following year, some two months later in the season, there had been no recurrence of the flood of the previous year, but the Darling was at a still lower ebb than before, and every lagoon and creek in its vicinity had long been exhausted and waterless. The water is described by Mitchell as being in all parts as transparent as that of the purest spring well, entirely losing all brackish taste below an extreme point of Dunlop's Range, where a hill consisting of a very hard breccia closes on the river so as to separate the plains

above it from those lower down. The taste of the water was found to be worst where the river is nearest to D'Urban's Group—above that, at the junction of the Bogan, and for seventeen miles from thence downwards, it was excellent.

The *Williorara*, or *Laidley's Ponds* was supposed to be a mountain stream flowing in a south-westerly direction into the Darling, which it joins in about 142° 26' E. long. 32° 26' S. lat. By it captain Sturt hoped to penetrate the northern interior, but on examination it proved to be merely a channel of communication between two lakes that were on either side of it, called Minandichi and Cawndilla, to which it conveyed the surplus water of the Darling during the floods. It was about fifty yards broad, with low muddy banks, and its course of about nine or ten miles was exceedingly tortuous, but almost due west. Cawndilla lake is merely a shallow basin of considerable extent, filled by the river floods, and retaining them for a short time only. Immense quantities of fish, however, pass into these temporary reservoirs, and the floods are consequently looked for by the natives with anxious expectation. Sir Thomas Mitchell when concluding his account of the Darling, in 1835, makes the following remarks, which illustrate some of the characteristics of this singular river too clearly to be omitted here, although in perusing them the reader must bear in mind that the river was visited by the surveyor-general during a favourable season, and therefore bore a very different aspect to that under which it has been seen by subsequent travellers:—

“From the sparkling transparency of this water, its undiminished current sustained without receiving any tributary throughout a course of 660 miles, and especially from its being salt in some places and fresh at others, it seems probable that the current, when in that reduced state, is chiefly supported by springs. It would appear that the saltness occurs when the springs also fail, and may be attributed to the same causes, whatever they are, by which all known waters unconnected with springs or streams are said to become salt. The bed of the river is at an average depth of about sixty feet below the common surface of the country. To this depth the soil generally consists of clay, in which calcareous concretions and selenites occur abundantly; at other parts the clay impregnated with iron forms a soft kind of rock in the bed, or banks of the river. There are no traces of water-courses on these level plains, such as might be expected to fall from the hills behind. The hills, nevertheless, contain some hollows and gullies which must, in wet seasons, conduct water to the plains; the distance of such heights from the river being seldom less than twelve miles, and it would appear that the intervening country is of such an absorbent

nature, and so extensive, that any torrents from the higher country are imbibed by the soft earth, for the hollow parts are seared with deep broad cracks, which in wet seasons must take up and retain much water, until it is either evaporated, or sinks to lower levels. The water may thus be absorbed and retained for a considerable time, and escape by slow drainage into the river, especially where the lower parts of such plains are shut in by hills approaching the channel. Thus, where the extremity of Dunlop's range shot forward into the wide level margin, we found that the water had lost all taste of salt, a circumstance most easily accounted for, by supposing that springs being more abundant there, from the near vicinity of the hills, had diluted the water which we had found salt higher up.

“The marks of high floods were apparent on the surface, to a distance frequently of as much as two miles from the ordinary channel. Within such a space the waters appear to overflow, and then to lodge in hollows (covered with *polygomonum junceum*), and which were then full of yawning cracks. Such parts of the surface would naturally become first saturated in times of flood, and be the last to part with moisture in seasons of drought. I observed that there was less of that kind of low ground where the water was saltest, which was to the westward of D'Urban's group.

“The basin of the Darling, which may be considered to extend to the coast ranges on the east, appears to be very limited on the opposite or western side, a desert country from which it did not receive, as far as I could discover, a single tributary of any importance. A succession of low ridges seemed there to mark the extent of its basin, nor did I perceive in the country beyond, any ranges of a more decidedly fluviatile character.

“Some of the hollows behind the immediate banks on both sides contained lagoons; in some of these, reeds had at length taken the place of water; in others, the first coating of vegetation which the alluvium receives on exposure to the sun, consisted of fragrant herbs, and amongst them we found the scented trefoil (*trigonella suavissima*), which proved an excellent anti-scorbutic vegetable when boiled. The surface of the earth near the river is unlike any part of the earth's face that I have elsewhere seen. It is as clear of vegetation as a fallow-field, but with greater inequality of surface, and full of holes. The soil is just tenacious enough to open into cracks, for the surface becomes so soft and loose that the few weeds that may have sprung up previous to desiccation seldom remain where they grow, being blown out by the slightest wind. Over such ground it was fatiguing labour to walk, the foot at each step sinking in to the ankle, and care being necessary to avoid holes always ready to receive the whole leg, or sometimes a man's whole body. The labour which this kind of ground cost the poor bullocks, drawing heavy carts, reduced them to such a state of weakness, that six never returned from the Darling.” “Of the hills in general it may be observed, that those on the left bank are most elevated at the higher parts of the river, whereas those on the right bank rise into greatest height towards the lower parts of the river, as far as explored by us. The plains extend on each side of the channel to a distance of six or seven miles, and are in general clear of timber. That deep and extensive bed of clay, so uniformly filling the basin of this river, has every appearance of mud deposited. Behind them the

country is sparingly wooded, except by the stunted bush (*myoporum montanum*), which forms a thick scrub, especially on the side of the low hills. On the river bank, trees peculiar to it grow to so large a size, that its course may be easily distinguished at great distances, and thus these facilitated our survey in a very great degree. These gigantic trees consist of that species of eucalyptus called blue gum in the colony. Its searching roots seem to luxuriate in the banks of streams, lakes, or ponds, where it is so constant to moisture, that the thirsty traveller soon learns to recognise its shining trunk and white gnarled arms, as the surest guides to water. The alluvial portion of the margin of the Darling is narrow, and in most places overgrown with the dwarf box, which is another species of eucalyptus. In this alluvial part there are hollow places as already observed, covered with the *polygonum junceum*, which is an unsightly leafless bush or bramble. Grass is only to be found on the banks of the river, for, strictly speaking, the margin only can be considered alluvial, for this being irrigated and enriched by the floods, is everywhere productive of grass, which grows there abundantly, even where none appears in the back country.

"In the back-ground beyond the plains, some casuarinæ and eucalypti are occasionally seen in the scrubs which grow on the red sand, and an acacia (having a white stem, the bark being much spotted) there grows to a considerable size, and produces much gum. Indeed, *gum acacia* abounds in these scrubs, and when the country is more accessible, may become an article of commerce.

"The plants, though in general different from those nearer the colony, were few, but curious. Of grasses I gathered seeds of twenty-five different kinds, six of these growing only on the alluvial bank of the Darling. Among these were a *poa*, and the *chloris truncata*, and *stipa setacea* of Mr. Brown. The country was, nevertheless, almost bare, and the roots, stems, and seeds, the products of a former season, were blown about on the soft face of the parched and naked earth, where the last spring seemed indeed to have produced no vegetation, excepting a thin crop of an umbelliferous weed.

"The natives of the Darling live chiefly on the fish of the river, and are expert swimmers and divers. They can swim and turn with great velocity under water, where they can both see and spear the largest fish, sometimes remaining under water for this purpose a considerable time. In very cold weather, however, they float on the surface in pieces of bark; and thus also they can spear the fish, having a small fire beside them in their bark canoe. They also feed on birds, and especially on ducks, which they ensnare with nets, with which a tribe is always provided. These nets are very well made, much resembling our own, and of a similar material, the wild flax, which grows near the river in tufts, and thus very convenient to pull. These are easily gathered by the

gins, who indeed manage the whole process of net-making. They give each tuft (after gathering it) a twist, also biting it a little, and in that state their flax is laid about on the roofs of their huts until dry. Fishing-nets are made of various similar materials, being often very large, and attached to some I have seen half-inch cordage, which might have been mistaken for the production of a rope-walk. But the largest of their nets are those set across the Darling for the purpose of catching the ducks as they fly along the river in considerable flocks. These nets are strong, with wide meshes, and they are hung up on a lofty pole erected for the purpose on one side, usually opposite to some large tree on the other, being easily suspended upon these supports, as occasion requires; such poles are permanently fixed, supported by substantial props, and it was doubtless one of this description that captain Sturt supposed to have been erected to propitiate some deity.

"The native knows well 'the alleys green' through which at twilight the thirsty pigeons and parrots rush towards the water, and there with a smaller net hung up, he sits down and makes a fire ready to roast the birds which may fall into his snare."

The ana-branch, or ancient channel of the Darling, is described by Eyre, who discovered it, as running through the scrub half-way between Lake Victoria and the main stream, with a course of fully sixty miles, nearly parallel to the latter. This singular watercourse forms, in times of flood, another connecting channel between the Darling and the Murray, leaving an immense desert island of low or scrubby lands between it and the Darling. At such times it has a strong current running upwards, caused by the back-waters of the Murray. According to captain Sturt, it has a broad channel and long reaches, but is wholly wanting in pasture, or timber of any size. The plains of the interior formed the banks, and nothing but salsolacæ grew on them. No water, he says, ever flows down the ana-branch into the north.

Victoria River, the *Warrego*, and other streams discovered in 1846, by Sir Thomas Mitchell, and subsequently visited by his able assistant, Mr. Kennedy,* have been already referred to (pp. 393, 394); nor is there, as far as I am aware, sufficient information possessed concerning these streams to furnish a more detailed description.

* When writing of the expedition conducted by this brave but unfortunate gentleman (p. 395), I mentioned that he was supposed to have perished in an encounter with the natives. He was sent to survey the country lying between Rockingham Bay and Cape York, but the stock of provisions being well nigh exhausted, Mr. Kennedy divided his party, and proceeded towards Cape York, in the hope of procuring the supplies which had been forwarded from Sydney by water. Of the nine men left behind, seven perished of ague, produced by over-

fatigue and food both insufficient and unwholesome, for they were compelled to eat the flesh of the wretched horses dried in the sun; and the last survivors (one of whom was Mr. Carron, attached as botanist to the expedition), were too weak to bury their deceased comrades. The fate of those who accompanied Mr. Kennedy was equally melancholy; one of them, named Costigan, accidentally shot himself, and Mr. Kennedy leaving him in the care of two others, pursued his way, in the hope of obtaining speedy succour accompanied only by his faithful

COUNTIES.—New South Wales, according to the "Blue Book" of 1846, contains twenty-two counties, whose area, population, number of acres under cultivation, and produce, will be given in a subsequent chapter. To this number several others have been, or are on the point of being, added. These divisions are so little dwelt upon, and indeed so rarely alluded to, by the writers on the topography of New South Wales (Mitchell alone excepted), that I have found it difficult, after a careful examination of the writings of Oxley, Lang, Braim, and others, of the excellent local journals, and of the colonial and geographical magazines published in England, assisted by the information acquired by personal observation, to furnish anything approaching a clear or detailed description of the counties. Dr. Lang, in his valuable work on New South Wales, remarks, "that, except in government deeds or legal documents, the grand natural divisions of the country are the only ones known

or recognised by the colonists, who accordingly speak only of the districts of the Hawkesbury, of Hunter's River, of Bathurst, of Illawarra, of Argyle, and of Port Macquarie. For the colonial readers, therefore, of the present day, who have not yet arrived at the feeling of countyship (if it may be so termed) manifested in the mother country, a separate delineation of the counties may not be necessary; but the want of it would, I think, be felt by readers in the United Kingdom; and it is to them more especially that I would fain render familiar the state of this and every other British colony, sure that (under Providence) much benefit would thereby result. The following is a brief account of the oldest established counties. The first in point of settlement—

Cumberland county, has a coast line, stretching southward, of about fifty-six miles, and an extreme breadth, from the sea to the base of the Blue Mountains, of forty-six miles.

attendant, an aboriginal named Jackey Jackey, through a country swarming with hostile natives. These savages, according to Jackey's statement, came stealthily behind, and hiding in the scrub, threw large jagged wooden spears at them, by which both they and the horses were wounded. Kennedy fell to rise no more, his last injunction to his weeping follower being, to endeavour to preserve his papers and to convey them to the governor. The poor boy, following the directions of his unhappy master, succeeded in reaching Port Albany, and informing the captain of the schooner lying there with supplies, of the sad results of the expedition. Captain Dobson hastened to Shelburne Bay, but arrived there, as before stated, in time to save two only of the ill-fated band. Jackey Jackey's account of the death of poor Kennedy is so simple and pathetic, that I cannot resist quoting it here:—

"I asked him, 'Mr. Kennedy, are you going to leave me?' and he said, 'Yes my boy, I am going to leave you;' he said, 'I am very bad, Jackey; you take the books, Jackey, to the captain; but not the big ones, the governor will give anything for them.' I then tied up the papers; he then said, 'Jackey, give me paper, and I will write.' I gave him paper and pencil, and he tried to write; and he then fell back and died, and I caught him as he fell back and held him, and I then turned round myself and cried; I was crying a good while, until I got well; that was about an hour, and then I buried him; I dug up the ground with a tomahawk, and covered him over with logs, then grass, and my shirt and trousers; that night I left him near dark. I would go through the scrub, and the blacks threw spears at me, a good many, and I went back again into the scrub; then I went down the creek which runs into Escape River, and I walked along the water in the creek very easy, with my head only above water, to avoid the blacks and get out of their way; in this way I went half-a-mile; then I got out of the creek and got clear of them, and walked on all night nearly, and slept in the bush without a fire. I went on next morning,

and felt very bad, and I spelled for two days; I lived upon nothing but salt-water. Next day I went on and camped one mile away from where I left, and ate one of the pandanos; on next morning I went on two miles, and sat down there, and I wanted to spell a little there, and go on; but when I tried to get up, I could not, but fell down again very tired and cramped, and I spelled here two days; then I went on again one mile, and got nothing to eat but one nondo; and I went on that day and camped, and on again next morning, about half a mile, and sat down where there was good water, and remained all day. On the following morning I went a good way, went round a great swamp and mangroves, and got a good way by sundown. The next morning I went and saw a very large track of black fellows. I went clear of the track and of swamp or sandy ground, then I came to a very large river and a large lagoon, plenty of alligators in the lagoon, about ten miles from Port Albany. I now got into the ridges by sundown, and went up a tree and saw Albany Island. Then next morning at four o'clock, I went on as hard as I could go, all the way down, over fine clear ground, fine iron bark timber and plenty of good grass; I went on round the point (this was towards Cape York, north of Albany Island) and went on and followed a creek down, and went on top of the hill and I saw Cape York; I knew it was Cape York, because the sand did not go on farther; I sat down then a good while; I said to myself, this is Port Albany, I believe inside, somewhere. Mr. Kennedy always told me that the ship was inside, close up to the main land; I went on a little way and saw the ship and boat. I met close up here two black gins and a good many piccaninies; one said to me, 'powad, powad,' then I asked her for eggs—she gave me turtles' eggs, and I gave her a burning-glass; she pointed at the ship, which I had seen before; I was very frightened of seeing the black men all along here, and when I was on the rock, coeying, and murry murry (very, very) glad when the boat came to me."

The Hawkesbury and Nepean rivers form seven-eighths of the inland boundary of this county, which, notwithstanding its inferiority in size and the general character of its soil, is the most important and the most densely populated of them all, Sydney, the capital of the colony, being situated in it, and also the towns of Paramatta, Liverpool, Windsor, Richmond, and Campbell-town.

The maritime boundary is generally bold and deeply indented. For the distance of five or six miles from the sea, the country wears a bleak and barren aspect, consisting of ridges of stratified sandstone; the soil poor, in some places swampy, and clothed with a few stunted eucalypti and dwarf underwood.

Beyond this coast-girdle the aspect begins to improve; an undulating country extends for ten miles; and where the hand of civilization has not been in active operation, a stately forest of eucalypti, varied with a species of casaurina, appears, diversified here and there with farms and tenements, and intersected by broad and excellent turnpike roads; but the soil in this belt is still poor on the surface, as it rests on a sandstone formation. At the distance of twenty to twenty-five miles, the forest is lofty, but not dense; there is little or no underwood, and the average number of trees to the acre does not exceed fifty; while a charming variety of hill and dale, clothed with luxuriant herbage, is covered with bleating flocks and lowing herds, among which may be seen, at intervals, the spacious mansion or snug farm-house of civilized man. Throughout the whole of the county, from the sea-coast to the base of the Blue Mountains, the land can scarcely be considered elevated, but is a continued series of undulations, until it approaches the Nepean and Hawkesbury rivers, which are bordered by extensive plains of extraordinary fertility. Formerly, one immense tract of forest land, covered with very heavy timber, extended with little interruption from below Windsor to Appin, a distance of fifty miles; of which a large portion is now cleared and under cultivation. The rocks in this tract are either

common or calcareous sandstone, ironstone, and in some few places whinstone: these form soils of various degrees of goodness, the whinstone generally the best. In some places small pebbles of ironstone, not larger than peas, may be found scattered over the surface. This, wherever it occurs, is a sure sign of a poor hungry soil.*

Prospect Hill, the most conspicuous eminence in Cumberland, is situated near the centre of that county. It is cultivated nearly to the summit, and the rich red soil on the trap rock is remarkably productive.

The land, on approaching Port Jackson from the southward, appears low, compared with the coast of the Illawarra district: the cliffs near Port Jackson are about 200 feet in height; and in general effect and outline, though darker coloured, not unlike the far-famed Dover cliffs of Albion.

Suddenly an abrupt breach is seen in this sea-wall, against which the vast volume of water in the Southern Pacific is rolled with incessant swell; but the moment the tempest-tossed mariner has fairly passed through this singular cleft or fissure, the waters are as tranquil as a mill-pond. On the south head of the entrance of Port Jackson an excellent lighthouse† was erected by governor Macquarie, which captain Stokes says he saw, in H.M.S. *Beagle*, at a distance of thirty miles, from a height of fifty feet, during the period of a clear atmosphere.

The capital of New South Wales, named in honour of Viscount Sydney, his Majesty's secretary of state for the colonies in 1788, is situated in 35° 52' S. lat., 151° 17' E. long. For nearly a quarter of a century after its original establishment on the shores of Sydney Cove (Port Jackson), the now important city was little more than an insignificant village of bark huts and wooden skillings, scattered here and there among fields and gardens. Soon after the arrival of governor Macquarie, a survey was made of the whole locality, and the future town marked out on a regular plan.

Sydney is built partly on a small promontory, and partly in a narrow ravine or valley.

* *Account of New South Wales*, by James Atkinson, Esq.

† The lighthouse is in 33° 51' 40" S. lat., 151° 16' 50" E. long.; the tower is admirably built; the height of the light (a revolving one) from the base being 76 feet, and above the sea 277 feet,—total 353. The inner S. head bears from the lighthouse N. by W. $\frac{3}{4}$ W. distant a mile and-a-quarter. The outer N. head bears from it N. by E. two miles. The inner S. and

outer N. heads lie N.E. $\frac{1}{2}$ E. and S.W. $\frac{1}{2}$, of each other distant a mile and one-tenth. The light can be seen from S. by E. to N. by E., and from a ship's deck, on a clear night, eight to ten leagues, appearing like a luminous star. Bearings magnetic, distances nautical—variations 9 degrees E.

N.B.—The N. end of the "Sow and Pigs" rocks, near which there is a light, bears from the inner S. head S. W. by W. half a mile.

The formation on which it stands is a free-stone rock, which passes inland for about two miles, in undulating and nearly parallel ridges, in a direction almost due south of that portion of Port Jackson generally known as the *Stream*, or *Middle Harbour*, which, with Sydney Cove and Darling Harbour, encloses greater part of the city on three sides. The ridges decline as they recede from the Middle Harbour, until they terminate in an almost level plain, bounded on the south by a transverse range of elevated rock, known as the Surry hills, which comprise the southern suburbs.*

The views from the higher part of the capital are bold, varied, and many of them very picturesque; the magnificent harbour of Port Jackson, like a lake studded with islets, indented with coves of singular beauty, whose tranquil recesses afford a secure haven to hundreds of vessels, is ever an attractive object; while inland, the diversity of hill and dale, of rock and woodland, of grassy slopes and brilliant parterres, interspersed with princely mansions, cottage ornées, and substantial homesteads, combine in forming many charming prospects.

The position of Sydney admirably adapts it for the centre of a commercial empire. Its haven, which is about fifteen miles long, and, in some places, three miles broad, is completely land-locked. Along the water-side, except that portion occupied by the demesne contiguous to government house, there are wharfs, stores, ship-yards, mills, various manufactories, distilleries, steam engines, breweries, &c.; behind these, in irregular succession, rise the numerous public and private buildings of the Australian metropolis. In several parts, ships come close alongside the wharfs, and their cargoes are hoisted direct from the hold into the warehouses. The streets are laid out generally at right angles; thirty-four of them

* By an act for regulating the police in the town and port of Sydney, and for removing and preventing nuisances and obstructions therein, which came into operation 30th September, 1833, the boundaries of the town of Sydney, port of Sydney, Sydney Cove, and Darling Harbour, were thus fixed:—

Town of Sydney.—Bounded on the north by the waters of Port Jackson, from a land-mark at the head of Blackwattle Bay to Rushcutter's Bay; on the east by the stream entering Rushcutter's Bay, to a bridge on the South Head Road, at the north-west corner of Sydney Common; and by the western boundary of that common to a road extending westward to the back of Cleveland House; on the south by that road and its western fence, prolonged to a land-mark on the road to Cook's River; on the west by the western side of the road to Cook's River, and

have each a carriage-way of not less than thirty-six feet, (several have from forty to sixty feet), and a foot-way of not less than twelve feet. Their length varies from one to three miles; they are well paved or macadamized, regularly cleaned, watered, and lit with gas. George-street and Pitt-street have continuous ranges of handsome cut stone or brick edifices, with shops that would do no discredit to Regent or Oxford-street, London. Indeed, the modern structures generally, may, in several respects, fairly vie with those of an European capital; and many of the older houses, though constructed with little pretensions to taste, were yet (owing to the abundance of good brick earth, and excellent building stone, so easily obtainable,) strongly and usefully built; and, with their neat gardens in front, present a cheerful appearance.

The recently-erected government-house, which stands in a conspicuous position, overlooking Sydney Cove, is a very handsome structure, built of white freestone, in the Elizabethan style of architecture. Its foundations are laid in the solid rock, out of which the basement and cellars are quarried; and the whole tower, at the north end, seventy feet high, and twenty feet square, with a flag-staff, thirty feet high, forms a striking feature from the harbour, of which the house commands a fine view. The building is 170 feet long, and 40½ high; the ball-room, 50 feet by 28 feet; drawing-room, 40 by 28; ante-room, 15 by 28; dining-room, 45 by 26. All the rooms are 26 feet high, and finished in superb style; the staircases are of carved cedar, and the chimney-pieces of fine colonial marble. The cost to the colonists has, I believe, been between £50,000 and £60,000. The contrast is very great between this princely mansion and the canvass house of the first governor of New South Wales, or with the that line prolonged to the land-mark at the head of the Blackwattle Bay.

Port of Sydney.—The channel extending westward from the heads of Port Jackson to Long Nose Point, including Sydney Cove, Darling Harbour, and extending one mile up Middle Harbour, and the various other bays or inlets on each shore thereof.

Sydney Cove.—The waters included within a line extending from Dawes' Point to the north-west bastion of Fort Macquarie, and the shores to the southward of this line.

Darling Harbour.—The waters included within a line extending from Dawes' Point to the south-east point of the shore nearest to and opposite to Goat Island; the shores of this harbour on the side of the town, and those opposite to them.

wretched wooden tenements in use for several years.

There are numerous temples dedicated to the worship of God; among which are, five large and commodious Episcopalian churches, besides a missionary Congregational church; three Presbyterian churches; two Roman catholic—St. Mary's cathedral and St. Patrick's church, both spacious edifices, highly ornamented; five or six Wesleyan chapels; a Baptist chapel; one Australian Methodist chapel; a Friends' meeting-house; and a Jewish synagogue.

St. Andrew's Cathedral was constructed as the Episcopal church of Australia, on the creation of a diocese in communion with the church of England; the foundation stone was laid in May, 1839, under the auspices of the first bishop of Australia. This handsome edifice is 720 feet from east to west, including the tower, whose pinnacles have an elevation of 120 feet. The height of the body of the church is seventy feet. It will contain a congregation of about 2,000. The expense of its erection is estimated at £50,000, towards which the inhabitants contributed largely; one family alone, that of Robert Campbell, M.C., subscribed £500.

The Roman Catholic Cathedral is the largest and most expensive sacred edifice in the colony; it was commenced in 1820, and it is not yet completely finished. Built of freestone, in the form of a cross, it is an excellent specimen of Gothic architecture, and being situated in a commanding position in Hyde-park, is now an ornament to the city.

St. Phillip's Church has a peculiar interest attached to it, as being the oldest place of worship in the colony. Commenced in July, 1793, it was several years before it was fitted for the celebration of divine service. George the Third regarded its erection with deep

interest; and not content with expressing his satisfaction that such a building was in progress, his Majesty forwarded to the colony (from his private purse) a costly communion service of plate, which arrived safely in October, 1803, and is still used in this church. The earnest solicitude evinced by the king expedited the building, which was consecrated on Christmas Day, 1810. It is a plain, useful structure, with a round tower, which commands an extensive prospect.*

St. Andrew's Kirk, a handsome Gothic church, was commenced in November, 1833, and finished in September, 1835. The walls are elevated, and include a spacious area, there being a projecting entrance in front, leading to the gallery. Between the main windows there are square buttresses, and two circular turrets surmounted by pointed spires. The interior is admirably fitted up; the groined arches of the ceiling rest upon six fluted columns with ornamented capitals; the cedar pannels and Gothic framing are particularly handsome. The government gave the site for the building, but the cost of the kirk was chiefly defrayed by subscriptions from members of the established church of Scotland.

St. James' Church occupies a commanding site at the north end of Hyde Park. The foundation was laid in October, 1819, by governor Macquarie, and it was completed about the end of 1822. It is in the Grecian style of architecture, with a lofty spire and belfry, and is constructed of bricks, strengthened by large and handsome pilasters of freestone. There is a superior organ at the end of the church, and the pulpit is of excellent workmanship.

The Scots' Kirk is a substantial plain building, and the other temples of worship are well constructed. As population in-

* The deep interest taken by the "good old king" in the establishment of the first Christian church erected at the antipodes, where there are now five Protestant dioceses, viz., Australia (Sydney), erected in 1836; New Zealand, 1841; Tasmania (Van Diemen's Land), 1842; Melbourne (Port Phillip), 1847; and Newcastle (New South Wales), 1847—was in unison with his well-known piety of character; a piety in the exercise of which he continued to manifest the reasoning power, in other respects entirely dethroned. During the awful lunacy with which the mind of George the Third was afflicted, his spirit remained unclouded in its devotion, and during his wonted hours of prayer, his Majesty's supplications were daily uttered to the Almighty disposer of events—that the Lord of Heaven and Earth would bestow especial care and favour on the nation, deprived by His will of the superintendence of their lawful sove-

reign, and that He would be to the people of these realms their temporal as well as spiritual King, directing aright the counsels of those to whom the supreme power was delegated. The transmission of a communion service to St. Phillip's church at Sydney, is in perfect accordance with the deep reverence or his Majesty for that holy and indispensable ordinance. It is not generally known that some time before the demise of George the Third, his Majesty expressed an earnest desire to receive the Sacrament. The clergy and the medical attendants on his Majesty did not think it advisable to grant the request, whereupon the king solemnly administered the bread and wine to himself, with a fervent prayer that if in this he committed the sin of presumption, he might be forgiven—no other means being left for his obedience to the divine command, or the satisfaction of his deep yearning for the comfort of the Holy Sacrament.

creases, new churches and chapels are built, and Sydney is, on the whole, better provided with the means of enjoying public worship, than many districts of London—where, it will be remembered, there was recently one parish with 20,000 inhabitants, and only one church.

The *Sydney College* owes its existence chiefly to a private individual, Dr. Bland, who was originally a surgeon in the royal navy, but was transported along with a lieutenant of the ship in which he served, for being engaged in a fatal duel with another officer of the ship. Dr. Bland has long been known as the good Samaritan of Australia; possessed of great skill in his profession, of high general attainments, a gentleman by birth, education, and feeling, he acquired the esteem of general and lady Darling, and of all classes in the colony. Wealth was poured freely into his hands by the affluent, and its recipient as quickly passed it away to the poor; not satisfied merely with contributing both by his skill and pecuniary charity, to alleviate the physical suffering of his fellow-creatures, Dr. Bland took the lead in the formation of a grammar-school in 1825; in 1828-9 the worthy doctor made a successful effort to enlarge and improve the institution; in 1830 the grammar-school expanded into Sydney College, with a fund of £10,000, subscribed in 200 shares of £50, each share entitling the holder in perpetuity to the nomination of one student at the college. The Old and New Testament are read without note or comment; no religious book is used without the authority of the president, and a committee of fifteen members, elected annually by the aggregate body of trustees. The building is commodious, and the course of education in classics, mathematics, and natural philosophy, good.

The *Australian College* was instituted 31st December, 1831; it combines a series of schools for the education of youth in the elementary branches of education, and gradually extends to the higher course of instruction. The buildings are in chaste style, large, and capable of containing more than 100 boarders; like the Sydney College, it is not confined to any particular religious denomination. A chapter in the Bible is read by each teacher every morning in the presence of all the pupils attending his class.

There is a *Normal* institution for secular education alone, and many excellent semi-

narics for both sexes. The Sunday schools are well attended. [See Supplement.]

Among the other public structures in Sydney, is the *Theatre Royal*, which cost £10,000 in building; the colonists truly aver, that it "would be an ornament to the Great Babylon." The architectural description given of it, is as follows:—

"In front of the theatre there are two splendid shops, between which there is a spacious entrance to the lower and upper boxes, enclosed by a pair of massive iron gates. The saloon leading to the two tiers of boxes, is divided for an entrance for each portion of the visitors. The interior of the house is arranged into two circles of boxes, with several private and family boxes; an extensive pit, with raised seats, and a spacious gallery. To the lower circle of boxes is attached an elegant dress saloon, 40 feet by 20. The size of the theatre is 100 feet by 53; the stage, 52 feet by 47; the opening of the proscenium, 8 feet; distance from front to front of the boxes, 27 feet; also, a commodious orchestra, with the necessary green and dressing-rooms; the height of the building is 50 feet. The whole is fitted up in the modern style, with a handsome glass chandelier in the centre of the roof, and the building is so arranged, that in case of fire, all parts of the house have communications for escape."

The theatre was erected by Mr. Barnett Levy. In the early days of the colony, the "legitimate drama" was performed in the gaol of Sydney. The public Banks are all substantial, and, in some instances, ornamented buildings; the Head Police Office, Benevolent Asylum, Prisoners' Barracks, Post Office, deserve a record for their suitability to the purposes for which they were constructed. The Soldiers' Barracks are large and plain. Indeed, the number of good mechanics among the convicts, and the vigilant superintendence of engineer officers, have materially contributed to secure for Sydney a very superior order of public edifices. A handsome range of stone buildings, with a noble colonnade forming a verandah and balcony, contains the *Legislative and Executive Council Chambers*, and two spacious Hospitals. The *Court House* is built on an eminence in that portion of the suburbs termed the Surry hills, and adjoining it is the *New Gaol*, an excellent building well arranged for the classification and separation of prisoners. The gaol covers a considerable area of ground, it is erected on a hill, built of freestone, and surrounded by a massive wall thirty feet high. The *Custom House* and the *Public Library* are designed upon an equally extensive and substantial scale. The *Public Markets* are held in a double range of narrow buildings about 200 feet in length, floored with freestone, the roofs

being supported by stone piers. A fountain of water in the centre of the amphitheatre tends to preserve cleanliness; at seven in the morning the ringing of a great bell announces the opening of the market, and throughout the day a vigilant police preserves order. The position of the marketplace, in the centre of the city,* its commodious construction, and the peaceable manner in which business is carried on, enhance the effect produced on the eye of a stranger by the abundance, excellence, and cheapness of its varied supplies, and combine to form a scene which, could it be viewed by our over-worked and under-fed operatives, would preach more effectively in the cause of emigration to a *British colony*, than other arguments, though eloquent and sincere, and teach a new lesson to many of our political economists.

There are several small forts, but, as explained under the head of *military defences*, there is no protection where most needful—at the Heads of Port Jackson. The defences of the harbour are shewn in an official statement.

Fort Macquarie is situated at the extreme point of the eastern entrance to Sydney Cove, the access to which it directly commands. It is a permanent work of masonry—a square of 30 feet face, having a small circular bastion at each angle affording space for one traversing gun. Three faces of the square are open to the sea, one of which is pierced for three guns. Ten twenty-four pounders are mounted. The *terreplein* is twenty-two feet above the level of the sea. In the centre of the land face is a two-storied tower, with a magazine in the basement calculated to hold 350 barrels of gunpowder. The tower is intended to cover a small detachment of soldiers, with the necessary stores for the battery. The land communication is by a permanent bridge over a dry rock. This work will take in reverse any work erected on Pinchgut Island, from which it is distant 1,062 yards. A non-commissioned officer and twelve men are at present quartered in the tower; not more than six men in addition could be put under cover.

Fort Phillip is situated on the highest ground within the northern portion of the city; it appears to have been the intention

* No beast can be killed in Sydney without inspection and certificate from an inspector appointed by the government, and for the inspection a fee of threepence is paid. All slaughter-houses are licensed.

to construct a pentagon at this point, the sides measuring 100 feet. The work was commenced in 1804, and partly carried up to the height of eighteen feet, six inches; nothing further was done, the plan of the work, it is presumed, being found defective. The situation is highly favourable for a work of defence (a citadel), at an elevation of 157 feet above the sea; it commands a great part of the city of Sydney, the anchorage, and the access to Sydney Cove and Darling Harbour. It also takes in reverse Dawes' Battery, at the distance of 715 yards; Fort Macquarie, at 1,062 yards; and Pinchgut Island, at 2,124 yards. Six six-pounder guns are placed on one of the faces of the old work, for the purpose of a saluting battery. There is a permanent magazine at this point for 200 barrels of gunpowder; but no accommodation for troops.

Dawes' Battery is situated on the point forming the western extremity of Sydney Cove, which it separates from Darling Harbour. The work consists of an open *barbette* battery, capable of mounting six twenty-four pounders. It immediately commands Fort Macquarie, at a distance of 728 yards, and also commands the approach to, and anchorage in, the Cove. The platform of the battery is at an elevation of seventy feet above the sea, to which the glacis extends. There is no accommodation for troops.

Bradley's Head is a commanding point on the right approach to the city of Sydney by sea, distant about 4,596 yards. The battery, when completed, will mount seven twenty-four pounders. The site is important, commanding, as it does, the ship-channel, at 1,000 yards. Ships forcing this passage would immediately come under fire from a work at Pinchgut Island, distant 2,834 yards. This work was suspended in 1842, by order of the inspector-general of fortifications. There is no accommodation for troops.

Pinchgut Island is situated nearly mid-channel, on the approach to the city of Sydney, 1,062 yards from Fort Macquarie. A work on this point was put in progress in 1841, but suspended soon after, by orders from England. The work would intersect the fire from Bradley's Head, on the approach up the harbour, and would be supported by Fort Macquarie and Dawes' Battery. Vessels must pass within point-blank range of this spot.

Goat Island Magazine, at the entrance of Paramatta river, is the principal depôt for

gunpowder; there is a bomb-proof magazine capable of containing 3,000 barrels of gunpowder. There is barrack accommodation for a non-commissioned officer and a guard of twelve men, for the protection of the magazine.

The number and calibre of the guns in these forts is—mounted, 24; dismounted, 13; unserviceable, 15. Of the mounted, 16 are twenty-four pounders, 1 twelve-pounder, 1 nine-pounder, and 6 sixteen-pounders. Of the dismounted, 2 are twenty-four pounders, 4 are twelve-pounders, 2 are six-pounders.

Building land in Sydney is let at a very high rate; in George-street (the Regent-street of New South Wales) it has been sold at £20,000 per acre, and some ground at the rate of £50 per foot. Large sums have been expended on shops, stores, and ware-rooms; one auctioneer spent £5,000 in the enlargement of his premises. Hotels and inns are numerous; some on a large scale, which, in luxurious appointments and high charges, may vie with the first-rate hotels in the parent state. The *Royal Hotel* has, it is said, already cost £30,000, and will require a like sum for its completion. The ball-room and the coffee-room are of noble dimensions; the private apartments spacious and superbly furnished, and the dormitories "scarcely to be counted."

The colonists are not sparing in efforts to improve and adorn the metropolis. There is a circular quay at Sydney Cove, on which there has been expended up to December, 1848, £27,709. The building for the colonial museum at Sydney has already cost in its construction about £6,000. On the new government-house, the residence of the representative of the queen, no less than £50,000 of the taxes raised from the colonists have been expended on the structure, although the original estimate was not more than £25,000. The new prison at Darlinghurst cost the colony up to December, 1848, fully £51,000. A general cemetery, termed the Necropolis, has been aided with £5,000 of the colonial revenues. New barracks have been built for the use of her Majesty's troops, and £60,000 have been appropriated for the purpose. More than £1,000 have been employed in making a dry dock at Cockatoo Island.

Hyde Park, a piece of land about two miles in circumference, has been judiciously reserved as a pleasure-ground for the citizens, and from its elevated and agreeable position will, when planted, surpass in beauty any of the parks attached to European capi-

tals, except Hyde Park, London, Phoenix Park, Dublin, and the Prater of Vienna. The Sydney gardens justly rank among the chief attractions of the city, and are situated on a slight elevation which rises gradually from a picturesque and secluded cove on the eastern side of the capital, and are distant about five minutes' walk from the new government-house. The site, plan, and arrangement of these gardens are all good. A stone wall, twenty feet high, which runs east and west, divides them into two portions. That on the south and land side is elevated, and devoted chiefly to botanical purposes: a magnificent pine of that most magnificent species, well named the *auracaria excelsa*, planted more than thirty years ago, first attracts the eye, while all around coral trees, with their rich scarlet flowers; bread-fruit trees from the Sandwich Islands; pomegranates; acacias, covered with beautiful parasites; bananas, *Banksia*, many descriptions of palms, and an infinite variety of other tropical trees are to be seen flourishing luxuriantly in the same ground with the oak, ash, and other English trees and plants. The northern or sea-coast garden extends for nearly a mile along the shore, and is laid out in winding walks, arbours, shrubberies, green slopes, and grassy terraces, elevated a few feet above the murmuring ripple of the glassy wave. In the centre of the garden is a pond surrounded by weeping willows of immense size, and in the centre stands a plain granite obelisk, dedicated to the memory of Allan Cunningham, the celebrated Australian botanist and traveller, whose indefatigable exertions and correct taste contributed materially to the formation of these gardens.* The government demesne, close to the gardens, is a well shaded and pleasing drive; and during the week-days the performances of one of the bands belonging to the regiment stationed at Sydney, adds to the pleasure of the gardens, which however seldom present so animated a scene as on Sundays, when thronged by all classes of the citizens.

Sydney is supplied with water, partly by wells sunk fifteen to thirty feet below the surface, and partly by a tunnel or subterranean aqueduct, about two miles and-a-quarter long, which conveys water from the Lachlan swamp to the south-east end of the city. Four-fifths of the tunnel, the whole of which averages five feet in width, and the

* *Sketch of New South Wales*, by J. O. Balfour, Esq., 1845.

same in height, is excavated in the solid rock, and the remainder is formed through sand, with chiselled masonry without cement. There are three offcuts, one forty-five feet in length, another eighty feet, and a third 284 feet, all of the same depth and width as the main tunnel; the entire mass of excavation throughout the work amounted to 255,930 cubic feet. Springs (met with in the progress of the work) furnish additional supplies to the aqueduct. The tunnel was commenced in September, 1827, and the expenditure on it up to the 30th of June, 1837, was £22,971. It furnishes water for about 30,000 of the citizens.

Sydney was incorporated in 1842, and the charter of incorporation entitles the citizens, holding tenancies of £25 per ann., to the control over all local affairs, excepting the police, the management of which still remains vested in the executive government.

The corporation of the city, under the authority of an act of the colonial legislature, 6 Vict., No. 3, section 67, levy a rate, by assessment, on the inhabitants of the city; and under the 70th section of the Act of Incorporation, a police rate is raised by assessment. There are other sources of income for the corporation, viz.—a water rate for water laid on to houses; lighting rate; rent of three fountains in the city; markets, fines, fees, and licences. The revenue raised, under several heads, was—

Items of Revenue.	1845.	1846.	1847.	1848.
City rate assessed	£2,621	£2,086	£5,461	£6,037
Police fund	3,115	—	—	—
Markets, dues, and rents	2,344	2,225	2,488	2,600
Fees and fines	862	1,086	1,323	1,873
Licences, &c.	12	5	—	—
In aid of city fund	129	14	—	—
Water rate and licence	—	1,199	1,331	1,863
Lighting rate	—	—	804	216
Total	10,191	6,618	11,409	12,591

The mayor of Sydney has an annual salary of £800; and eleven other different officers of the corporation have salaries amounting, in the aggregate, to about £2,200. The repairing of the streets of the city costs about £8,000 a-year; the water-pipes and repairs of fountains, £2,200; the lighting, £700. The police of the capital, and of the colony generally, are paid out of the general revenues: the cost for 1848, was—city police, on land, £7,464; water ditto, £1,432; these charges are irrespective of the police in the interior, which cost, during the year 1848, within the settled districts, £21,229; mounted police, £9,177; native ditto, £227; showing a total annual charge for police in New South Wales of £39,529.

The census of March, 1846, gave the census of the city—males, 20,810; females, 17,548 = 38,358. The suburbs, at the same period, stood thus—Balmain, males, 682; females, 655; Camperdown, males, 125; females, 176; Canterbury, males, 128; females, 64; Chippendale, males, 219; females, 197; the Glebe, males, 538; females, 522; Newtown, males, 631; females, 584; O'Connelltown, males, 25; females, 15; Paddington, males, 422; females, 404; Redfern, males, 437; females, 428; St. Leonard's, males, 223; females, 189; Surry hills, males, 121; females, 86. Total in the suburbs, males, 3,546; females, 3,286 = 6,832. Then, in March, 1851, the city and its environs contained 53,924 English, or English-descended inhabitants. It now [March, 1853] contains, probably, about 70,000 of the Anglo-Saxon race. [See Supp^r.]

Sydney has a Chamber of Commerce, which is composed of the merchants, ship-owners, and others interested in the trade of the colony.* An *Australian Club* was instituted in the year 1838, and numbers about

been made, 2½; on giving orders for the provision of goods, 2½; on guaranteeing sales, bills, bonds, or other engagements, 2½; on the management of estates for others, 5; on procuring freight or charter on passage money, and on freight collected, 5; on insurances effected, ½; on settling losses, partial or general, 1; on effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1; on the recovery of money, 2½; if by law or arbitration, 5; on collecting house rent, 5; on attending the delivery on contract goods, 2; on becoming security for contracts, 5; on ships' disbursements, 5; on obtaining money on respondentia, 2; on letters of credit granted, 2½; on purchasing, selling, receiving from any of the public offices, lodging in ditto, delivering up, or exchanging government paper, or other public securities, ½; on all items, on the debit or credit side of an account on which a commission of 5 per cent. has not been previously charged in the same account, including government paper, 1; on entering and clearing ships at the custom house, each 1 guinea.

Warehouse rent.—On all measurement goods, 1s. per ton of 40 cubic feet per week; on liquids, 1s. 1d. per tun of 263

* In compliance with the wishes of correspondents that this work should be a reference for mercantile men as to the commission, agency, and other charges in our several colonies, I give the following data relative to New South Wales; but at the completion of the whole work there will be given with the last volume a statement of the rates of interest of money, commission and agency charges, rates of insurance, tariff of customs, &c., in the several dependencies of the British crown.

General rates of agency, commission, and warehouse rent, agreed on at a meeting of the New South Wales chamber of commerce:—

Commission per cent.—On all sales or purchases of ships and other vessels, houses or lands, where no advance on them has been made, 2½; on all other sales, purchases, or shipments, 5; on goods consigned, and afterwards withdrawn, or sent to public auction, if no advance on them has

300 members. The club-house, which has cost nearly £10,000, contains good accommodation; the entrance fee is £30; the annual subscription, £7 10s. The society met with at the Australian Club is, in point of good breeding and general intelligence, quite on a par with the generality of London clubs, and the rules by which it is governed equally stringent, not to say exclusive. There is, indeed, excellent society in Sydney for the most punctilious gentleman; he may choose his acquaintance from the thirty-six members of the Legislative Council, the bishop, archdeacon, and other clergy; the three judges; law officers of the crown; the officers of the troops stationed in the colony; the members of the government; the magistracy; numerous members of the medical and legal professions; and landed proprietors, and mercantile men of all grades. At the balls and assemblies in the capital, the beauty and elegance of the Australian belles is a theme of general admiration; and many a born Englishwoman finds herself eclipsed by the fair face, fine form, and witching graces of the "currency lasses."*

Sydney has its omnibi as well as London; they ply constantly between Paddington, on the South Head road, and the Star hotel, George-street, and between other parts of the city; hackney-carriages and cabs are also numerous.

There are several well-appointed four-horse coaches, such as could not now be found in England, plying between Sydney and Paramatta, Windsor, Richmond, Liverpool, and other towns in the interior. There is also a regular stage conveyance to Melbourne, Port Phillip. The several mail-coaches for the western and southern districts leave the post-office, Sydney, every afternoon (Sundays excepted), at five o'clock. The *Age*, *Australian*, and *Water-witch* four-horse coaches leave Sydney daily (*Sundays excepted*), for Windsor and Paramatta.

Fast and commodious steam-boats ply daily, morning and evening, between Sydney and Paramatta; and there is constant steam communication with Hunter's River, Port Stephens, Port Macquarie, and also with

gallons (old measure), per week; on sugar, rice, salt, and similar articles, 6d. per ton per week; on grain, 4d. per bushel for first month, and one half-penny per bushel, per week afterwards; on iron, lead, &c., 4d. per ton per week.

The following are the premiums charged by the Australian Marine Assurance Company for insuring vessels and merchandise:—

Per cent.—Sperm fishery, for twelve months, 8 to 10 guineas; ditto, for the voyage, 8 to 14 guineas; Hobart Town, to or from, 1 guinea; Launceston, ditto, 1½; New

Melbourne, Port Phillip, Boydtown, and other rising places south of Port Jackson.

Some of the recorded statistics of Sydney indicate the state of the city. Thus, in 1844, there were "eighty-six licensed stage-coaches plying in Sydney; 186 licensed draymen; and twenty-four licensed porters. The total number of licensed slaughter-houses for the year was fourteen: there are about 130 licensed watermen plying within the boundaries of Sydney. The total number of dogs registered in Sydney is only 1,766: there is reason to believe, that the number prowling about the streets, without any ostensible owner, is upwards of 3,000." It is fortunate that hydrophobia is unknown in Australia.

The Sydney post-office has been, for the last quarter of a century, under the management of an able and zealous postmaster-general, James Raymond, Esq., who has carried into effect numerous improvements. The metropolis holds communication with four districts in the colony—the western, southern, northern, and coast districts. The *western*, in 1848, contained fourteen district post-offices, the most distant (Wellington) being 230 miles; and the second nearest (Paramatta) fifteen miles; the letter-charge to the latter is fourpence; to the former, tenpence. At Paramatta the delivery is twice daily; at six other places, daily: and, at the others, twice or thrice a-week. In the *southern* district there are thirty-five district post-offices; the nearest (Liverpool) is twenty miles, and the most distant (Belfast) 817 miles; the despatches are five daily, and the remainder twice and thrice a-week. The *northern* district has twenty-four post-offices, to each of which there is a daily, bi, or tri-weekly despatch. The *coast stations* have their post-office deliveries and despatches regulated by the steam-packets plying between them and Sydney. The number of letters despatched from Sydney post-office, in 1843, was 822,733; and the number of newspapers was 905,709. Compared with 1837, the number of letters had increased two-and-a-half-fold; and the newspapers three-and-a-half-fold. The post-office

Zealand and South Sea Islands, per month, 1; Manilla and China, to, 2½, from, 3; Madras, Bombay, and Calcutta, to or from, not including risk through Torres' Straits, 3; Mauritius, ditto, ditto, 2 to 4; Cape of Good Hope, ditto, ditto, 2½; United Kingdom, ditto, exclusive of war risk, 2½ to 3½; Rio de Janeiro and Bahia, ditto, ditto, 2½.

* For some years there were two denominations in the circulating medium, sterling and colonial currency; the European born obtained the name of *sterling*, and the colonial that of *currency*.

collections, at present, amount to about £15,000 a-year.

The distances, in English miles, of the different post towns in the colony, in 1848, from Sydney, are thus stated:—

Western District—Hyde, 8; Paramatta, 15; St. Mary, 29; Penrith, 33; Windsor, 34; Richmond, 39; Hartley, 78; Bathurst, 113; O'Connell, 125; Carwar, 144; Mudgee, 150; Molong, 163; Canowindra, 176; Wellington, 230.

Southern District—Liverpool, 20; Camden, 33; Appin, 43; Picton, 46; Wollongong, 64; Dupsto, 72; Berrima, 81; Kiama, 88; Shoalhaven, 103; Marulan, 108; Bungonia, 117; Huskisson, 121; Goulburn, 125; Gunning, 152; Bungendore, 161; Ulladulla, 163; Braidwood, 164; Yass, 117; Queanbeyan, 182; Broulee, 209; Gundagai, 244; Ovens, 429; Seymour, 528; Kilmour, 549; Melbourne, 587; Ballan, 637; Geelong, 641; Grange, 773; Belfast, 817.

Northern District—Patterson, 10; Carrington, 16; Clarencetown, by water, 24; Gresford, by water, 25; Wollombi, by water, 27; Singleton, by water, 31; Dungog, by water, 45; Jerry's Planes, by water, 46; Muswellbrook, by water, 59; Merton, by water, 66; Scone, by water, 75; Murrurundi, by water, 99; Cassilis, by water, 125; Armadale, by water, 150; Tamworth, by water, 154. The distance of the other post towns by water to the north and south of Sydney, is not laid down. Since 1848 several other post towns have been added to the above list.

There are no railroads as yet in New South Wales, but it is probable that ere long tram roads at least will be made. The iron and other hard woods of Australia would serve in the first instance instead of iron rails; by this means roads might be made round the head of Botany Bay, through the valleys to the southward, through the rich Maneroo country, and towards Illawarra. Another trunk line would lead to the north-western regions. Sooner or later New South Wales, Port Phillip, South Australia, and subsequently Western Australia, will be connected by railroads, for the colonists have plenty of iron, coal, and wood, for their construction, and the want of navigable rivers will necessitate the adoption of this mode of locomotion. Mr. Woore has set forth a project for a railway to connect Windsor, Penrith, Ellerslie, Vermont, the Oaks, Bong-Bong, and Goulburn with Sydney. The main line from Sydney to Goulburn, is 122 miles; the Windsor branch, 13½

miles; Ellerslie branch, 10½ miles; Penrith branch, 8½ miles = 154½ miles.

Whereas the distances from Sydney by the present lines of road are—to Paramatta, 14; Windsor, 39; Penrith, 33; Goulburn, 125; Bong Bong, 80; Camden, 39. Of these 154½ miles of railway, fifty-four miles run through government land, and 102½ miles through private property. Twenty miles is already cleared of timber, and 134½ miles to be cleared. Supposing the line to be three chains wide, or 198 feet, and 154½ miles long, it would contain 3,708 acres, 2,460 of which would be through private property, and 1,248 acres through government property. In the course of the line, with the exception of the Windsor branch, there are, besides the formation of the road, eight deep cuttings, and seven side cuttings. The erections are, five termini, seven stations, two brick or stone viaducts, ten second-class wooden viaducts, eight first-class bridges, twenty-three second-class bridges, eighty-three third-class bridges, seventy-four culverts, and about eight accommodation bridges.

By means of wooden instead of iron rails, the wheels of the locomotives "bite" closer, and steeper gradients may be ascended. The estimated cost of this line, with wooden rails, is £419,403, or only £2,714 per mile. Of this sum 275,000 sleepers, nine feet long, (rough square,) being for two lines on 154½ miles, each six feet from centre to centre, five shillings each, cost £68,000; making 154 miles of road cost £300 per mile = £46,200; eight cuttings, £16,000; seven-side ditto, £10,500; building bridges, culverts, stations, termini, draining, &c., about £120,000; laying sleepers and rails, £200 per mile, £30,900; 3,270,000 feet of scantling, 8 × 4, at twelve shillings per 100 = £19,620; locomotives, carriages, turn-tables, &c., £50,000. These details give some idea of the difference of cost between a railway in the United Kingdom and one in Australia. At Sydney excellent steam-engines are made; the carriages and everything required would be prepared in the colony.

Having, in the previous pages, carefully gathered together—even at the risk of offering what some may consider dry detail—the materials from which my readers may, I trust, be enabled to form a correct idea of this fair and youthful city, I may conclude with a few general remarks. My own feelings, on first landing, from the east coast of Africa,

were those of mingled delight and astonishment. I was not prepared to find, at the antipodes, a city so home-like, so thoroughly English in its character; nor could I have believed it possible that a colony of such comparatively recent establishment, founded too under very peculiar circumstances, could have acquired a degree of order, comfort, cleanliness, and security, not inferior to that which distinguishes some of the best and oldest cities of the mother country. Lest, however, it should be supposed that a bias in favour of this colony, or of the British colonies generally, influences (even unconsciously) my pen, in writing of them, I prefer quoting, as far as practicable, the statements of other writers, and citing the impressions produced on the minds of other travellers, instead of merely offering my own opinions.

Count Strzelecki, writing in 1839, says:—"Since my arrival in Sydney, I cannot help asking myself—Am I really in the capital of that 'Botany Bay,' which has been represented as 'the community of felons'—'the most demoralized colony known'? &c. &c. Let the authors of these and other epithets contained in the works they wrote on New South Wales congratulate themselves! My mystification was complete. The evening I effected my disembarkation in Sydney, I did it with all imaginary precautions, leaving my watch and purse behind me, and arming myself with a stick. I found, however, in the streets of Sydney, a decency and a quiet which I had never witnessed in any other of the ports of the United Kingdom. No drunkenness, no sailors' quarrels, &c., &c. Since then, how many nights like the first did I not witness, in which the silence, the feeling of perfect security, and the delicious freshness of the air, mingled with nothing that could break the charm of a solitary walk!"

Captain Stokes, R.N., of H.M.S. *Beagle*, who visited Sydney in 1840-1, says he was much struck with the strange contrast its extensive and at the same time youthful appearance presented, compared with the decrepid and decaying aspect of the cities in South America, which he had recently quitted, and which were founded two centuries ago, by a nation at that time almost supreme in Europe, upon the shores of a fertile continent. In Sydney he beheld with wonder what scarce half a century had sufficed to effect; for, "where, almost within the memory of man, the savage ranged the desert wastes and trackless forests, a noble

city has sprung, as though by magic, from the ground, which will ever serve both as a monument of English enterprise and as a beacon from whence the light of Christian civilization shall spread through the dark and gloomy recesses of ignorance and guilt."—(Vol. i. pp. 244-5.)

Mr. C. I. Baker, who recently visited Australia, describes very naturally the impression made upon strangers from the United Kingdom by the Australian metropolis. "Sydney is certainly an extraordinary place; and if the colony continues to progress as it has done during the last twenty or thirty years, it will, ere another generation have passed away, be one of the first cities in the world. A new-comer rubs his eyes, and repeatedly questions whether his long voyage has not been a dream, and he himself still in the mother country: the streets, the houses, the shops and other buildings, the carriages, including stage coaches, flies, and cabs, are all constructed as in England; the bustling busy population are all English or thoroughly Anglified; so also are the various customs of life, the goods displayed in the shops, the furniture, the grates with their coal fires, the style of living and mode of cooking, the wine, beer, &c.;—in short, from first to last, you have England, and England only."*

In another place, Mr. Baker bears the following testimony to the character of the people. It is after adverting to there being one, or sometimes two of her Majesty's regiments stationed at Sydney, and a great many sailors from all parts of the world frequenting the port, he adds—"Yet it is one of the most orderly towns a traveller can visit. I witnessed neither the brawl nor drunkenness, nor the shameless prostitution which so often shock and offend in our own streets; whilst the only beggars I met with were two blind men. Another proof of the prevalent order of the town is the general decorum observed on the sabbath. On the whole, great credit is due to the authorities for their excellent government of a population, amongst whom might be expected much disorder and unseemly immorality."—(pp. 132, 133.)

No government could, however, preserve the order and decency so manifest in Sydney, unless seconded by a strong sense of propriety in the inhabitants themselves, who attach great importance to the obtaining and maintenance of a good character

* *Sydney and Melbourne*. 1 vol. 1845.

and a fair fame;* and Mr. Baker speaks of having been struck by "the superior breeding, education, and intelligence of many of the settlers not locating in fellowship in any particular neighbourhood, but amply scattered throughout the colony—men, moreover, of unblemished character, active in mind and body, and of agreeable and open manners."

PARAMATTA, the second town in the county of Cumberland, was established, as we have already seen (p. 403), in the very early days of the colony. For a considerable time it was merely an *encampment*, or succession of huts, and the older settlers continued to speak of it as *the camp*, long after it had grown to be a village, and even a town. The name of Rose Hill, given by its first European inhabitants, has been happily superseded by the native designation of the river on which it is situated. The *river* is, however, chiefly a continuation of Port Jackson, its waters being salt until just beyond Paramatta bridge, where a dam thrown across by governor Macquarie, checks the further advance of the tide. The commissariat store, a large brick building, occupies a position at the extremity of the town, close to the beach, permitting boats to go alongside and have their cargoes hoisted up into its capacious granaries; while beyond this is a water-mill—a dam being here carried across, to keep up the necessary supply to work it.

The town extends over a considerable extent of ground, and is built along a small fresh-water stream, which falls into Paramatta river. The streets are regularly laid

* The diminution of crime of late years in Sydney, and throughout the whole territory of New South Wales, is very remarkable, and will be found detailed under the section on *Crime*, but it may be useful to give here a statement of the number of felonies in the colony for ten years—showing their number in proportion to the population, and to each 10,000 inhabitants; thus:—

Years.	One in each	To each 10,000 Inhabitants.
1839	148	67
1840	196	51
1841	208	48
1842	276	36
1843	294	34
1844	327	31
1845	362	27
1846	358	28
1847	449	22
1848	481	21

This shews an actual decrease of more than *forty per cent.*, and a relative decrease of crime of more than *sixty-eight per cent.* in ten years.

out—the principal of them, George Street, is about a mile in length; the houses, which are generally detached from each other, and partly surrounded with gardens, are mostly built of brick or white freestone—the latter being very abundant, and, from its excellent quality, much used for grindstones. The public buildings are substantial and well constructed. The government-house is agreeably situated on an eminence, in a somewhat extensive demesne, amid carefully tended gardens; Sir Thomas Brisbane, who made it his chief residence during his administration, erected an observatory, which he placed under the superintendence of a skilful astronomer, named Dunlop. There is an excellent institution for orphans, situate on the banks of the river. In the vicinity of Paramatta is a Convict Lunatic Asylum, which contained on 31st December, 1848, eighty-eight male, and ten female invalids; 104 male, and twenty-four female lunatics; to these are attached, as servants, ten male and one female convict. The town lies in a sheltered valley, and its climate, during the winter months, is delightful; but in the summer the heat is sometimes intense, the difference of temperature between it and Sydney being generally as much as from six to ten degrees.

Paramatta is a corporate town, having a municipal district council; the annual income is about £1,200, consisting chiefly of tolls. The cloth manufactured here has obtained a high character, not only in the colony, but also in the mother country; and a soft woollen fabric called "Paramatta," has become equally celebrated, being (I am told) now deemed by the ladies as indispensable an article in their mourning attire, as bombazeen was, in that of their grandmothers. Several other manufactories have been recently established in the neighbourhood. A recent writer says, that "a silk institution has been formed there, under able management, and mulberry planting on a large scale has been commenced;"† and in the same work it is elsewhere stated, that extensive works for the smelting of copper ore are in operation at Lane Cove, on the Paramatta river. There are large salt works on the banks of the Paramatta river.

Paramatta, being the high road to Windsor and the northern districts, has numerous and commodious inns. It is much frequented by visitors from Sydney. The country in

† *New South Wales*, by a resident of twelve years' experience. 1849.

its immediate vicinity is very pleasing, extensive orangeries thrive luxuriantly, and in many places the land is well cultivated.

The distance between Sydney and Paramatta is about eighteen miles by water, and fifteen by land. Steam-boats run morning and evening between the two towns, and carry a great number of passengers. The trip by water is a delightful one; for, after leaving Sydney, a considerable portion of the interior of Port Jackson is traversed before entering the river, which forms some reaches, whose beauty must be acknowledged even by those who have but just before gazed upon the "harbour of an hundred coves." By land it is much less agreeable, the soil being generally of inferior quality, and the scenery very monotonous, notwithstanding the various dwellings, from the mansion and its spacious pleasure-grounds, to the cottage with its neat garden, and the only too numerous public-houses, which at intervals, on either side, indicate the vicinity of a thriving town. The oldest established family of Blaxland have a fine estate on the road between Paramatta and Sydney; and the large mansion and excellent farm of the late D'Arcy Wentworth is on the same line. Farms are also being formed along the Paramatta stream; and a village is springing up on a pretty turn of the river called Kissing Point.

From the portion of Paramatta situated beyond the river, a good road runs for some distance along the right bank of the stream, in a north-west direction, which leads to *Windsor*, the distance being about twenty miles. This town, formerly called the Green Hills, at present containing about 2,000 inhabitants, is situate near the confluence of the South Creek with the Hawkesbury, which at this point is 140 miles distant from the sea, and navigable for vessels of 100 tons burthen, four miles above Windsor. The town is very pleasantly situated, being built on a hill elevated 100 feet above the level of the Hawkesbury, and commanding a beautiful view of the surrounding country; its population and buildings are similar to those of Paramatta. The inns, as is the case, indeed, throughout the colony, are large and excellent; stage-coaches ply every day to and from Sydney *via* Paramatta, and steam-boats thrice a week, the distance between Broken Bay, where the Hawkesbury disembogues into the sea, and the north head of Port Jackson, being about fourteen miles. The land in the vicinity of Windsor

is extremely rich, and being in the possession of numerous small farmers, is carefully tilled, so that frequent farm-yards and extensive fields of grain, with herds of kine, add to the natural beauty of a very picturesque country. In some parts the broad and placid waters of the Hawkesbury are overhung by cliffs 600 feet in height, and the numerous vessels and boats on this noble stream form another attractive feature, and render it a favourite resort.

The town of *Wilberforce* lies on the opposite side of the Hawkesbury, obliquely to the right; and obliquely to the left is—

Richmond, a rising inland town, distant from Sydney thirty-nine miles.

Liverpool is situate on the banks of the George River, which disembogues in Botany Bay. Many persons, long accustomed to the term of "Botany Bay," believe that the colony is founded on the shores of this extensive inlet of the ocean. I have already stated, that such was the original intention, but it was never carried into effect; and the shores around Botany Bay are nearly as wild, as bleak, as barren, and almost as uninhabited, as when they were first visited by captain Cook and Sir Joseph Banks. Botany Bay is about fourteen miles to the southward of the Heads, as the entrance of Port Jackson is called; it is wide, open and unsheltered for vessels. I visited it, not liking to leave the country without having seen this famous spot. The only advantage derived from my journey, was the opportunity of contrasting the dreary desolation around its shores, with the busy hum of human industry at the contiguous harbour of Port Jackson, and of being reminded that about half a century ago, there was no difference in the wild waste of nature at either place. The country is flat around, but cleared and cultivated, though the soil is poor; the public buildings are the same as in the towns previously described, with the addition of a Male Orphan School. The Church is a good structure, but insufficient for the wants of the town. The Hospital is a handsome building, well adapted for the benevolent purpose of contributing to the relief of the population for miles around. Three miles beyond Liverpool is Lansdowne bridge, which is built of stone (by convict labour); the arch being of 110 feet span. There are stage-coaches daily between Liverpool and Sydney. It now contains about 5,000 inhabitants, and is yearly increasing in size and opulence.

A new town called *Canterbury* has been commenced, six miles from Sydney, where extensive works have been constructed for refining sugar.

Other towns and villages [see census in Supplement], viz.: — *Campbelltown, Appin, Penrith, Pitt-town, Petersham, Narellan, &c.*, are arising in different directions; each with its church, gaol, court-house, market, mill, and numerous spirit and general stores; and as population increases, they will augment in number and in extent. The post-roads throughout the county of Cumberland are numerous, regularly cut and levelled, well made, and kept in good macadamized order, by means of the tolls from turnpikes erected near the entrance of each town. The great thoroughfares have four railed fences at each side of the road, and mile-stones throughout. There are many cross-roads, some still in the original bush state, and known only by notched trees and a cart-rut.

Previous to quitting the county of Cumberland, it may be mentioned, that the road through the *northern* part, towards Wiseman's Ferry, to the Blue Mountains, has been made by following one continuous ridge of sandstone; but the *western* route, by Paramatta, is free from precipitous ravines, and the undulations sufficiently moderate, to admit the passage of a straight road; the soil also is good, consisting chiefly of decomposed trap, and producing crops as abundantly now, as when it was first tilled, forty years ago. In the neighbourhood are the hospitable mansions of the Lawsons, Lethbridges,* and other much respected settlers, who, in the early days of the colony, emigrated to New South Wales, and have contributed materially to the improvement of the land of their adoption.

CAMDEN COUNTY is divided from the county of Cumberland by a line bearing W. 20° W. from Bulli, on the sea-coast, to the head of the Cataract river, thence by that river and the Nepean to its junction with the Wollondilly, there called the Warragamba; on the west by the river Wollondilly to the junction of Uringalla creek, and by the Uringalla and Barber's creek to the Shoalhaven river; on the south by the Shoalhaven river, which separates it from the county of St. Vincent; and on the east by the ocean. The extreme length of Camden county is about sixty-six miles, and the extreme breadth fifty-five miles. Its surface is, in general, a continued succession of hill

and dale, the former sometimes rising into mountains, whose steep sides are clothed with varieties of lofty timber. There is some scenery in this county of a peculiarly wild and gloomy character. A remarkable range, consisting chiefly of trap rock, traverses the whole county, between the Wollondilly and the sea, in a south-east direction, extending from Bulli to a small boat harbour named Kiama; the highest part is known as the Mittagong range. Although so much of this county is mountainous, and a large portion of its area consists of ferruginous sandstone, it yet contains an unusual proportion of excellent grazing land, and also much good wheat land, especially towards the side of the Shoalhaven river. The Razor-back range is another remarkable feature in this part of the country. It is isolated, extending about eight miles, in a general direction, between W.N.W. and E.S.E., being very level on some parts of the summit, and so very narrow in others, while the sides are also so steep, that the name it has obtained is descriptive enough. Around this trap range lies the fertile district of the Cow Pastures, which are said to comprise about 60,000 acres, the greatest part consisting of a light, sandy loam, resting on a substratum of clay. These pastures extend northward from the river Bargo to the junction of the Warragamba and Nepean rivers; they obtained their name from the large number of cattle found there, which had for their original stock three run-aways, belonging to the herd landed from H.M.S. *Sirius*, soon after the founding of the colony. Barragorang, in this county, is a long narrow valley, hemmed in between a continuous ridge and the Blue Mountains, with only one pass into it, and that a very precipitous one. It runs north and south along the banks of the Warragamba, and consists of a stripe of rich soil, matted with the finest native herbage, and most picturesquely variegated with rocky and precipitous mountains, frowningly impending on either side, their rugged declivities occasionally adorned with waving shrubs and verdant heaths. But the most interesting portion of Camden county is the Illawarra, a narrow stripe of arable land, situated between the ocean and the eastern base of a lofty ridge of trap rock, running parallel to the coast, and connected with Mittagong range. The average breadth of this belt of land is from four to six miles, and its length about sixty. This singular region is termed

by the colonists the garden of New South Wales; Mitchell, Lang, Cunningham, Stokes, and other writers, speak in the most enthusiastic terms of its surpassing beauty. The charms peculiar to mountain scenery of the wildest and most romantic order, and those also which characterize more particularly the shores of a mighty ocean, are each enhanced by the rich luxuriance of tropical vegetation, while birds of exquisite form and brilliant plumage take their flight through the clear, exhilarating "Australian" air. The stately palms, the graceful tree-ferns, and the lofty cedars, entwined to their very summits by parasitical plants of various kinds, which, stretching from tree to tree, form a sort of embowered roof, afford a perfect refuge from the sun's too fervid rays, and overshadow a rich and varied undergrowth of wild vines and matted creepers. No pestilential vapour, no deadly miasm lies in wait to poison, with insidious influence, the unwary loiterer. In Eastern Africa (at Zanzibar), Madagascar, and Java, I have looked upon regions (in many respects resembling this) which seemed, at first sight, to realize the idea of Eden; but painful experience soon teaches a European, that to him these fair scenes are fraught with disease and death; and the contemplation of them inspired me with much the same feeling with which a man would regard the mask, whose painted beauty served as a temporary cover to loathsome deformity.

It is difficult to account for the tropical character and extraordinarily luxuriant vegetation of Illawarra. It may be in some degree attributable to the shelter afforded by the adjacent mountains from the cold winter winds, the nourishment obtained from the streams which flow from those heights, and the moist breezes of the sea; but I am inclined to think with Dr. Lang, that the chief cause may be traced in the soil, which exhibits many indications of a volcanic origin. In some parts of the district of Illawarra, or Five Islands, (as it is sometimes called, from some rocky islets which lie near the coast,) there are grassy meadows, of fifty to a hundred acres in extent, quite destitute of timber, and surrounded with a border of the lofty fan-palm, or cabbage-tree. Dr. Lang states, that several extensive tracts are in the hands of non-resident proprietors, a circumstance (he adds) always to be regretted wherever it occurs in the colony; but its resident

inhabitants consist chiefly of small settlers, who cultivate grain, potatoes, pumpkins, &c., for the Sydney market, their produce being conveyed to the capital by water, in small coasting vessels. The cedar-tree, both white and red, abounds in the mountains of this district and in the deep gulleys; and the cutting and conveying to Sydney affords employment to a considerable population, somewhat similar, both in habit and character, to the lumberers of Canada. The cedar of New South Wales is used all over the colony for all sorts of cabinet and joinery work; it is somewhat similar, in appearance, to Honduras mahogany, and the choicer specimens take a fine polish. Its price depends on the number of buildings going on in the colony at any particular time; but it is generally sold at twopence to threepence per superficial foot of one inch in thickness. Illawarra is rendered very difficult of access by the numerous ravines in the range which forms its western boundary, to whose summit, on the interior side, sandstone extends. Half-way down Illawarra mountain (the height of which is estimated by Dr. Lang at from 1,500 to 2,000 feet high, and whose descent to the beautiful Illawarra country is the most precipitous and rugged bridle road, used in the colony for a road), is a singular place of refuge, so capacious as to have received three horses and their riders, formed by a dead tree of immense size, the interior of which has been consumed by fire, although it is still about 100 feet in height.* About nine miles from the foot of the mountain is the thriving little village of *Wollongong*, situated on a small harbour on the coast.

Berrima, the county town of Camden, is eighty miles from Sydney, and is situated in a hollow, on the Berrima river. It is 2,096 feet above the level of the sea, and the climate is sensibly different from that of the low country towards the coast. The gooseberry and currant thrive and attain a good size and flavour on this table-land while the potato and the apple acquire an European character; but the maize and the orange, which succeed well below, refuse to grow in this higher region. The children also, at Berrima, have fine ruddy faces, as at home; unlike the pale faces of Sydney and the lower country generally. (Lang's *Phillip Island*, p. 238.)

The country immediately round Berrima is of but indifferent quality, though at the

* Lang's *New South Wales*.

distance of a few miles it becomes of a much better description; one chief inducement in the choice of this locality having been its abundant supply of good water, materials for building, and the vicinity of a small agricultural population. The church, court-house, and gaol are handsome buildings; and at the entrance of the township is a substantial bridge of stone-work.

Camden, the estate of the Messrs. Macarthur, is a remarkable place; it extends for many miles along the bank of the Cowpasture river (on the Camden side), and exhibits striking proofs of the enterprising spirit of its proprietors. The best kinds of grape, from the Rhine, Madeira, and other vine-growing countries, have been imported by these gentlemen, who have also brought out several German families, at their own cost, for the purpose of introducing the best mode of cultivating the grape and preparing wine.* These laudable efforts appear likely to prove very successful; and the Messrs. Macarthur will rank, as promoters of production and manufacture in their native land, second only to their worthy father. Their farming is pursued on an excellent system, and is very productive. Silos, or subterranean granaries, have been constructed at Camden; and Mr. Atkinson mentions one (filled with maize and millet) being opened there, after the expiration of six months, and a great part of the grain taken out, which proved to be in a state of perfect preservation, and the straw lining quite sound and dry, except a little near to the under surface of the brick arch.†

Towns not before mentioned.—Wilson, Picton, Kiama, and Murrionbah. *Rivers*.—Wingecarribee, a fine freshwater stream, rising in a swamp of that name, and flowing through Berrima, which empties itself into the Wollondilly; the Nattai, which flows into the Wollondilly at Barragorang; the Kangaroo, Avon, Cataract, Bargo, and

* The first cultivators of the vineyard of the Messrs. Macarthur were some piratical Greeks, sent out as convicts, who, at the expiration of their sentences, returned to their own country.

† The construction of silos in those countries (*i. e.*, Hungary, Poland, &c.) where they are in common use, is exceedingly simple. An elevated site is fixed upon (if possible, the pinnacle of a small mount), so that there can be no drainage of water into the granary from higher ground in its vicinity. A pit is there sunk, resembling an inverted lime-kiln; the depth and dimensions of this pit must depend upon the quantity it is required to contain, which may be 200 or 2,000 bushels. (See Atkinson's *Account of Agriculture and Grazing in New South Wales*, p. 75.)

Minumurra. *Creeks*.—Myrtle, Werriberri, Wollondoola, Black Bob, Yarringal, Broger's, Broughton's, Mullet, and Wattle. *Eminences*.—Jellorr, Bonnum Peak, Keera Bonnum, Keera, Bullio, Kembla, Nundialla, and Pianeng, several of which command extensive and magnificent prospects.

ARGYLE COUNTY is bounded on the north by the river Guinecor, from its junction with the Wollondilly, to its source near the Burra Burra lagoon on the dividing range; on the west, by the dividing range from Burra Burra, by Cullarin to Lake George, including the three Breadalbane Plains; on the south by the northern margin of Lake George to Kenny's Station; from Lake George to the Alianoyonyiga mountain, by a small gully, descending to the lake; from Alianoyonyiga, by the ridge extending south-east, to the hill of Wollowolar; and from Wollowolar by the Boro creek, to the Shoalhaven river, to the junction of the rivulet from Barber's creek; by the rivulet, from Barber's creek to its source; across a narrow neck of land to the head of the Uringalla creek; by the Uringalla creek to its junction with the Wollondilly river; and by the Wollondilly to the junction of the Guinecor above-mentioned; the nearest point to the sea being distant about twenty-five miles. Argyle is about sixty miles in length, its average being from twenty-five to thirty miles. The surface is generally undulating, consisting of tolerably high and extensive ridges, ramifying in various directions, with swelling hills and irregular plains and vallies between them, watered by the Wollondilly and other branches of the Hawkesbury and Shoalhaven rivers, besides a number of small rivulets and ponds containing water all the year round.

Argyle contains large tracts of open forest, where the basis of the soil is granite, and the country, though pleasing to the eye, from its park-like appearance, is poor, and seldom adapted for cultivation; but the soil is light, dry, and extremely well-suited for sheep-grazing, the surface being covered with a thin but very nutritive herbage. In other parts, however, whinstone predominates, and the land is of the best quality, being equally well fitted for either pastoral or agricultural purposes. Sir Thomas Mitchell speaks of the *anthistiria* or oat-grass, which grows in these tracts, as the best of any Australian grass for cattle, and one of the surest indications of a good soil and dry situation. Argyle is rich in minerals; cop-

per of the best ore is found near Arthursleigh, and other places. A description of marble is found there, which is said to resemble the famous Giallo Antico, of Italy. Near the Wollondilly, a few miles from Towrang, is a quarry of crystalline variegated marble, which has of late years been wrought to a considerable extent for chimney-pieces, tables, and other ornamental purposes.

Goulbourn, or *Mulwarree*, the county town of Argyle, distant 120 miles from Sydney, is situated in a fine tract of country, fifteen miles in length, with an average breadth of eight miles, called Goulbourn Plains, and is in the centre of an extensive pastoral and agricultural district. Dr. Lang deems it, beyond comparison, the finest town in the interior of New South Wales, and says that the buildings generally are of a much more substantial character, as well as of a much finer appearance, than those of most inland colonial towns. It is a busy and thriving place, and annually increasing in prosperity; the proposed communication by a railway with Sydney, if carried into effect, will add to the importance of the place. There is an extensive flour-mill, with a fourteen horse power steam-engine; a brewery, also carrying a steam-engine; and the inns are stated to be "quite splendid for the interior of a colony." The amount of business done in these establishments is indicated by the fact, that Mr. Bradley, their proprietor, pays £700 a year for carriage between Goulbourn and Sydney. The members of the church of England, Presbyterian, and Roman Catholic persuasions have each a neat temple devoted to their respective forms of worship. The Goulbourn, or Mulwarree Plains are supposed to have been, at no very distant period of time, the bed of a lake; the stones which are collected in particular spots, or which are dug up from excavations made to a great depth, consist of quartz, pebbles, rolled stones, and shingle, as if from the bed of a beach; the ridges at either side are like headlands. The Goulbourn Plains form part of a series of alluvial tracts which traverse the eastern part of the colony, and have an average elevation of about 2,000 feet above the level of the sea; the Goulbourn and Breadalbane Plains are in the south; the Bathurst, in the west; and the Darling Downs, which have a length of 120 miles, with a breadth of thirty to forty miles, are in the north.

The Breadalbane Plains are separated from those of Goulbourn by a ridge of forest land about eight miles across. The plains are situated on the high dividing ground, or waters hid between the waters falling eastward and westward. They have, probably, once been lagoons, of which there are several in the vicinity, viz.—Tarrago, Mutmutbelly, and Wallagorang; the latter is supposed to be the residuum of a lake which probably once covered the Breadalbane plains. In several parts there are what the Americans aptly, but not elegantly, term "salt-licks," on which the cattle depasture with great avidity, and with much benefit. There is a fine tract of pastoral country around these plains, at an elevation of 2,278 feet above the level of the sea. The pasturage has a rich velvet-like appearance. The three open flats or plains are circumscribed by some low hills; they extend for about twelve miles in the direction of the Sydney road, and have an average breadth of two miles.

Lake Bathurst, in this county, about 130 miles south-west of Sydney, and sixty miles inland, from Jervis Bay, is from three to five miles in diameter, and varies in size according to the quantity of water it receives from the torrents on the north-west and south-west—of which it forms the reservoir. The waters are pure—the depth I have not been able to ascertain. Mr. Peter Cunningham speaks of an animal resembling a seal, having been seen in this lake, apparently three feet long, and every now and then appearing above water to "blow." The aborigines call it "Devil-devil," and consider it an evil spirit.

Marulan, the second town in the county, is situated at the junction of the roads leading to Goulbourn and Bungonia, which latter town stands on a creek of the same name.

Rivers.—Wollondilly, Cookbundoon, Shoalhaven, and Guinecor. *Creeks*.—Windellama, Curran, Bangalore, Lerida, Crisps, Mulwarree Ponds, Woorondooronbidge, Kerrowong, Myrtle, and Uringalla. *Eminences*.—Wayo, Mount Fitton, Towrang, Marulan, Mount Macalister, and Mount Hobbes.

ST. VINCENT COUNTY extends along the seashore to the southward of Camden county, and includes the harbours of Shoalhaven, Jervis bay, and Bateman bay, already described, and is the general coast line of the colony. It is bounded on the north and west, by the Shoalhaven river; and on the south, by Moodong creek, Deua river, and Moruya river. Its length is about eighty-four miles,

and its breadth about forty miles. The greater, and especially the northern portion of this county, is very wild and mountainous; and will probably afford a rich field for geological and mineralogical research.* The southern portion affords the most soil available for cultivation or pasture; although, on Bateman bay, which is its limit on the south, much good soil cannot be expected, as Snapper Island, at the entrance, consists of grey compact quartz only, with white veins of crystalline quartz. On the upper part of the Shoalhaven river, there are many plains admirably adapted for agricultural purposes, the river there resembling an English stream, and flowing nearly on a level with the surface. The county is well watered by several small streams, of which the most considerable, called the Clyde, runs nearly parallel to the sea for a considerable distance.

Towns.—Braidwood is the chief; the others are Huskisson, Ulladulla, Broulee, Marlow, Narriga, Tianjara, and Farnham. *Rivers.*—Shoalhaven, Macleay, Clyde, Deuca, Mongarloo, Moruya, and Crookhaven. *Creeks.*—Wandagandria, Jervis, Yerrimong, Pigeon-house, Endrick, Jembaicumbene, Congola, and Groobyar. *Eminences.*—Pigeon-house, Currockbilly, Budawang, Womballoway, and Jillamatong.

South and south-west of St. Vincent county there has been recently marked out the counties of Dampier, Beresford, Auckland, Wellesley, Wallace, Cowley, and Buccleuch; but of the boundaries and characteristics of these counties we have as yet little precise information, excepting Auckland, which is described by Mr. Wells† as comprehending that portion of New South Wales, bounded by a line running from Cape Howe along the boundary of the district of Port Phillip, to the point where the said boundary crosses the 149th degree of E. long.; thence due north along the said 149th degree of E. long. to the lat. of 36° 40' S.; thence due east to the sea, and thence south along the sea coast to Cape Howe. It is about sixty miles in length, and forty in breadth. It contains the secure

haven of Twofold bay, on the south shore of which is situated the rising settlement of Boydtown. This thriving township owes its establishment chiefly to Mr. Benjamin Boyd, one of the most enterprising colonists in Australia, who, with his brother, Mark Boyd, of London, has very materially contributed to advance the interests of the colony, and to popularize New South Wales in England. There are two townships, named East Boyd and Eden, separated from each other by the river Kiah or Towamba. Point Brierly, about one mile from each township, is in 37° 6' 40" S., 149° 57' 42" east of Greenwich. Twofold bay is the chief port of outlet for the south-east districts of New South Wales, and is the key to the extensive Maneroo country, now divided into the several counties above named. Lieutenant Woore, R.N., who made the survey for the Admiralty chart, says that South bay, or that on the shores of which East Boyd stands, has a decided superiority over any other anchorage in Twofold bay, arising from the prevailing and strong winds blowing from the southward. It is more extensive than North bay, where Eden is, and possesses abundance of fresh water, which gives it a further advantage.

Boydtown, under the zealous exertions of its founder, already contains a neat Gothic church, the spire of which is visible twenty miles at sea, a handsome hotel, in the Elizabethan style, ranges of commodious brick stores, well-built houses, and neat verandah cottages; a jetty of several hundred feet in length, and a heaving-down hulk. There is an excellent whaling station, also extensive boiling-down and salt-provision establishments, &c. A light-house, now erecting on the South head, at the entrance of the bay, consists of a tower seventy-six feet in height, with a diameter of twenty-two feet. It is being built of white Sydney sandstone, in solid blocks of nearly half a ton each, and, independent of its light, will prove an excellent land-mark for the shipping which frequently take shelter in the bay, where they can procure, at East Boyd, abundance of provisions, fuel, and water. The produce exported already amounts, in value, to nearly £100,000 a-year. Mr. Benjamin Boyd has, after considerable labour, and at his own cost, constructed a road of forty-five miles, to convey the produce to Boydtown, from the famous squatting district known as the Maneroo plains, or Brisbane downs. The fine sheep-walks of

* My own opinion is, that gold will eventually be found there. [For recent gold discoveries, see Suppt.]

† *Geographical Dictionary or Gazetteer of the Australian Colonies.* By W. H. Wells. Sydney, 1848. This useful work, which I have but just procured, appears an admirable compilation of facts, collected with great care, and which, judging from the difficulty I have experienced in obtaining correct local information, must have been greatly needed.

Maneroo, which occupy a square of about 100 miles in extent, and are from 2,000 to 3,000 feet above the level of the sea, on the right bank of the river Murrumbidgee, lie to the eastward of the meridian of 149° , and extend upwards of forty miles to the southward of the parallel of $36^{\circ} 15'$, which appears to be the parallel of their northern skirts. They are bounded on the east by the coast-range of hills, which give an interior or westerly direction to the streams by which these downs are permanently watered; and on the west by the Australian Alps, known here as the Warragong chain.

Towns in Auckland county.—Boyd, Eden, Pambula. *Rivers.*—Towamba or Kiah, the Towaca, Merumbal, Bega, Bomballa, and Bemboka. *Eminences.*—The Wanderer's range, and Mount Imlay, so named, after Dr. Imlay, who first explored the adjacent country. This eminence is an excellent landmark, being about 3,000 feet above the level of the sea. These natural savannahs consist of a series of undulations of hill and dale, lightly timbered, with a rich soil, and well watered by the Deuna, Shoalhaven, Queanbeyan, Murray, Murrumbidgee, and Mitta-Mitta rivers, are a very favourite residence for squatters, and are capable of yielding support to many thousand inhabitants.

MURRAY COUNTY is bounded on the north-east by the Boro creek, from its junction with the Shoalhaven river to its source in the hill of Wollowalar; by the range thence to the Aliano-yonyiga mountain, between Lake George and Lake Bathurst, and by a watercourse descending from that mountain to Lake George, by the northern shore of Lake George to the hill on the dividing range, by the range in the west overlooking its northern extremity, and thence by Gandaroo creek and Yass river to the Murrumbidgee; on the west, by the Murrumbidgee river to the junction of Micaligo creek; on the south, by that creek to the Twins or Tindery Pics, passing between them to the source of Tindery creek, and by that creek to Queanbeyan river, by that river to the creek entering it from the hill called Tumanwong, and by a line from the source of Jerrabatgulla, in that mountain, to the junction of Currabeene creek with the Shoalhaven river, and on the east, by Shoalhaven river to the junction of Boro creek.

The length of this county is about seventy-eight miles; its breadth about forty-four miles. It contains several extensive tracts

of remarkable fertility, instances of which have been quoted in the description of the general character of the soil of New South Wales; and the oat-grass, before mentioned as growing spontaneously in Argyle, is also found here. A ridge of high land runs north and south through the eastern portion, in a somewhat parallel direction with the Shoalhaven river, which divides the county of Murray from that of St. Vincent. The most remarkable feature in this county is Lake George, which is stated by Sir Thomas Mitchell to have been in 1828 a sheet of water seventeen miles in length, and seven in breadth, the water being slightly brackish, but very good for use. The lake was then surrounded by dead trees (eucalypti) of about two feet in diameter, which also extended into it until wholly covered by water. It contained no fish; and an old native female said she remembered when the whole was a forest, a statement supported *pro tanto* by the dead trees in its bed. In 1836, Sir Thomas found the whole expanse covered with grass, and not unlike Breadalbane Plains. The site of Lake George, as also that of Lake Bathurst, in the adjoining county, is now under cultivation. The southern side of this *ci-devant* lake presents one continuous low ridge, separating its former bed from the head of the Yass river. According to Count Strzelecki, fragments of trees imperfectly fossilized have been discovered in this vicinity.

Towns.—Queanbeyan, situated on the Queanbeyan river; Bungendore, Yass, and Larbert. *Rivers.*—Yass, Jingery, and Mologlo. *Creeks.*—Morumbateman, Gundaroo, Jerrabombera, Jinglemony, Croonmier, Modbury, Torallo, Majura, and Batmaroo. *Elevations.*—Mount Ainslie, Bywong, Gourock Pic, the Twius, Cockatoo Hill, Balcombe Hill, and One Tree Hill.

KING COUNTY is bounded on the east by the dividing range forming the western boundary of the county of Argyle from the head of the Crookwell river, in $34^{\circ} 30'$ S. lat., to the head of the Gundaroo creek, near Lake George; on the south by Gundaroo creek and the river Yass to the junction of Derringullen creek near Bowning hill; on the west by the range of Bowning hill to the head of Boorawa river, and by that river to its junction with the Lachlan; on the north-east by the rivers Lachlan and the Crookwell to its source, as before mentioned. Its length is seventy-six miles, its breadth forty-three miles. The Cullarin range runs

from north to south, dividing this county from that of Argyle. The county town, at present represented by the thriving little village of Gunning, is situated in a fine flat of considerable extent, very suitable for growing wheat, barley, oats, potatoes, and fruit of the British varieties. It is surrounded by a fine tract of grazing country. Gunning is 152 miles from Sydney, and nearly midway between Goulbourn and Yass, being distant from each about twenty-eight miles. The latter town, though of no great extent, (containing about sixty houses,) comprises a portion of two counties, being built on each side of the river Yass, which separates the county of King from that of Argyle. Yass plains or downs are also divided by this stream, whose bed (according to Dr. Lang) is 1,311 feet above the level of the sea. These tracts consist of fine grassy hills, thinly covered with wood, and fertile vales clear of timber. Mr. James says, "there appears no limit to the rich feed for sheep." The country is covered with flocks and herds. Proceeding from Gunning towards Yass plains there is a rapid descent from the higher level of the surrounding country. Dr. Lang estimates this descent at 800 to 1,000 feet. Near Yass, on the Sydney side of the river, is situated the well-built cottages and extensive gardens of Henry and Cornelius O'Brien, and of Hamilton Hume, J.P. Mr. H. O'Brien's grounds are very tastefully laid out. His numerous flocks and herds roam over an "hundred grassy hills," the progeny of a few sheep and cattle with which he sat himself down in the wilderness about twenty years ago. Civilization has now reached and surrounded him. Like the Antediluvian patriarch Jabel, Mr. O'Brien is considered "the father of such as dwell in tents," alias *bark huts*, and of such as have cattle and sheep beyond the boundaries of the colony, *i.e. squatters*. As stated under the head of commerce, Mr. O'Brien, finding the value of his stock wofully reduced by the panic in 1843, commenced the "boiling down" system, and converted his unsaleable live stock into the valuable export of tallow for the English markets.

Rivers.—Yass, Narrawa, Lachlan, Boorowa, Weeho, and Crookwell. *Creeks.*—Hovell's, Cullaba, Broman, Pudman, Derringullen, Bango, Gundaroo, Jarrawa, Dimond, Lambton, and Cartwright. *Eminences.*—Mount Darling, Mudoonen, Chaton, Dixon, and Narrawa.

GEORGIANA COUNTY is bounded on the east by the dividing range extending from the head of the Crookwell in 34° 30' S. lat., by Burra-Burra lake and Mount Werong, to the head of Campbell's river; on the north by Campbell's river to Pepper creek; on the west by Pepper creek and the range extending from its head toward the source of Rocky Bridge creek, and by that creek and the Abercrombie to the river Lachlan; on the south by the Lachlan and the Crookwell to its source as aforesaid. The length of this county is about fifty miles, and its breadth forty. The surface is irregular and varied, and in general well adapted for grazing, but only occasional patches on the banks of rivers and streams afford much promise of successful agriculture.

Towns.—Not any. The chief place is Bingham. *Rivers.*—The Abercrombie which rises in a mountain about three miles east of Mount Murrum, and after a course of about ninety miles, falls into the Lachlan; the Campbell, Isabella, Crookwell, and Bolong. *Creeks.*—Rocky Bridge, Tuena, Kangaroo, Glengarry, Mulgowrie, Julong, Kagaloolah, Phils, Copperhaunia, Muligonna, Carrawa, and Peppers. *Eminences.*—Werong and Mount Lawson.

WESTMORELAND COUNTY is bounded on the north-east by Cox's river from its junction with the Wollondilly to the small creek entering the Cox from the west, one mile south of the new road to Bathurst; on the north by that creek and one descending to Solitary creek, near its junction with Antonio's creek, and thence by the Fish river to Campbell's river; on the west by Campbell's river to its source in the dividing range, and by the dividing range of Burra Burra lagoon; on the south by the river Guinecor from Burra-Burra lagoon, to its junction with the Wollondilly; on the east by the Wollondilly to the junction of Cox's river above-mentioned. Length, sixty-four miles; breadth, thirty-two miles. Westmoreland is the most mountainous of the counties of New South Wales, and although the elevations are not of great height, seldom exceeding three to four thousand feet, they are numerous and generally barren. One portion of the Blue Mountains, two miles to the north of Swashfield, is 4,000 feet above the sea. The head of the Fish river four miles E.S.E. from Mobrins, is 3,472 feet; Mobrins is 3,275 feet; a hill near Bunbingle's creek is 3,554 feet; and one in Snake's valley is 3,576 feet.

Mounts Collong and Murrum are remarkable peaks. There are, however, some fertile spots and excellent grazing districts in Westmoreland. The Emu valley, ninety-nine miles from Sydney on the road to Bathurst, is an extensive morass. O'Connell town, near the Fish river, on the borders of Westmoreland and Roxburgh, in O'Connell plains, 115 miles from Sydney, is the chief station in the colony.

Rivers.—Cox, Campbell, Wollondilly, Fish, Kowmung, and Guinecor. *Creeks.*—Jouriland, Tonatti, Lacy, Antonio's, Lowther, King, Wiseman, Native-dog, Fish river, and Stony.

BATHURST COUNTY is bounded on the north-east by the Campbell river, from Pepper creek, and by the Macquarie river to the junction of Lewis's ponds; on the west, by Lewis's ponds creek to Blackman's swamp, and thence to the Canobolas mountains; thence by the Panuara range, and rivulet of the same name, to the Belubula stream, and by that stream to its junction with the Lachlan river; on the south, by the Lachlan river to the Abercrombie and the junction of the Rockybridge creek, also by that creek and the range to the head of the Pepper creek, and by the creek to the river Campbell, as first mentioned. The county is in length sixty-five miles, in breadth forty miles. This transalpine country was considered inaccessible until 1813. It consists in general of broken table land, in some places forming extensive downs, without a tree, such as Bathurst plains, which include 50,000 acres, and are about nineteen miles in length, and of a breadth varying from four to eight miles, undulating, and with the Macquarie river meandering throughout their greater length, occasionally ornamented with fringes of swamp oak. These plains are 2,100 feet above the level of the sea; they are not unlike the Brighton downs, but with this remarkable peculiarity, that on the summits of some of the elevations, or knolls, are found dangerous quagmires, or bogs, resembling sometimes the dry bed of a pond, but at other times concealed by rich verdure. "Fairy rings" are frequent, and on most of them grow fungi of a large size. With the exception of small portions of land in particular localities, allotted to veteran soldiers and emancipists, the county is parcelled out into large farms of 2,000 acres each; the proprietors being free emigrants of a very superior class. Bathurst county is one of the most flourishing districts in

the colony; its society excellent; its resources, as a fine-woolled sheep farming district, considerable; and so salubrious is the climate that the first natural death did not occur until 1826, *twelve years* after its settlement. Bathurst town, on the banks of the Macquarie river, is in $33^{\circ}24'30''$ S. lat., and $149^{\circ}29'30''$ E. long., twenty-seven miles and a half north of Government-house, Sydney, and ninety-four and a half W., bearing W. $18^{\circ}20'$ N., eighty-three geographical or ninety-five and a half statute miles, and by the road distant 121 miles. The town is flourishing, and has its literary institution, &c.

This county in particular presents remarkable instances of a singular phenomenon observable in various parts of Australia, namely, what would be viewed in a long civilized country as the most striking evidences of former cultivation, the land being laid out in ridges apparently marked by the plough, and with a regularity of intervals which would secure a prize from a Scottish agricultural society. These plough ridges occur always on gentle declivities, where there is a tenacious subsoil with loose superstrata, and are doubtless produced by the action of water; as there are found, even on the tops of mountain ridges, extensive beds of water-sand and water-gravel, mixed with fragments of shells, presenting the identical appearances observed on the banks of rivers, or upon sea-beaches; but still the *regularity* of the distances in the plough ridges is unaccountable.

[The gold discoveries made here since this was written are described in Supplement.]

Mr. W. H. Wells, the able compiler of the *Geographical Gazetteer of the Australian Colonies*, describes a "magnificent" natural tunnel or archway, discovered by Mr. Davidson not long since, forty-five miles west of Bathurst town, on the Grove creek, about four miles above the confluence of that stream with the Abercrombie, and seven miles from Mulgunia. The tunnel is, in length, about 300 paces; the north entrance is seventy feet broad and fifty feet high; towards the centre the breadth increases to ninety feet, and the elevation to 100 feet; at the southern extremity it is about 100 feet broad, and seventy to eighty feet high; the whole direction not exactly straight. The roof is thickly covered with stalactites of different colours, some hanging down to a length of twenty feet. The sides of the tunnel, especially on the left hand, have the

appearance of galleries raised one over the other, supported by apparent carved work and ornamental pillars, the whole adorned by splendid stalagmites of various forms. Other caverns of great extent, but not yet fully explored, branch out of the main tunnel; one of them contains two massive stalagmites, resembling a pulpit and a tomb. The descent to the tunnel is through a very narrow defile, through which a creek flows direct through the main chamber of the cave.

Towns.—Bathurst, before mentioned, and Carcoar, 144 miles from Sydney, on the Belubulu river. *Rivers.*—Macquarie, Campbell, Belubulu, Abercrombie, and Lachlan. *Creeks.*—Rockybridge, Frederick's valley, Emu swamp, Peppers, Queen, and Princess Charlotte's vale; Foster ditto, Swallow, Coombul, Coombing, Lewis ponds, Cadian-gullong, Muramer, Mundoraman ponds, Milburn, Grubbenburn, Muringulla, Limestone Wangola, and Panuara. *Plains.*—Bathurst, Warwick, King's, Dunn's, and Pretty plains. *Eminences.*—Canobolas, and the Three Brothers.

WELLINGTON COUNTY, north-west of Bathurst, is bounded on the north-east by the river Cudgong; on the north-west by that river and the Macquarie, to the junction of the river Bell, near Wellington valley; on the west by the rivers Bell, Molong, and Bore-nore creek, to the Canobolas mountains; on the east by this range, and thence to Black-man's swamp, and by Lewis ponds, the Macquarie, Turon river, Cunningham's creek, and Cudgong creek, under Bocobel, to the Cudgong river. It is, in length, seventy-two miles, and in breadth forty-two miles. This county is famed for a beautiful and fertile valley, (Wellington valley), situated at the junction of the Bell and Macquarie rivers, distant 238 miles from Sydney, and 117 from Bathurst. The scenery is very charming, and the soil richly productive. In this county, as stated at pages 398-9, Sir T. Mitchell discovered some remarkable caves in the side of a low hill, sixty-five feet above the adjacent alluvial flat of Wellington valley. The entrance consists of two crevices, between large blocks of limestone, in one side of a hollow about twelve feet deep, and which has evidently been widened by water. One of the caves, at 180 feet from its mouth, has a height of sixty feet, and a breadth of twenty-five feet: the floor consists of reddish earth. A gigantic stalactite, at the lower end of the

cavern, gives somewhat the appearance of a vast Hindoo idol. Some of the caves have not been fully explored. The osseous remains found in these caves are very remarkable; some of the fossilized bones are supposed, by Professor Owen, to have belonged to a very large species of the kangaroo tribe, which is now extinct. Mudgee, the chief town of the county, is pleasingly situated on the Cudgong river. Another township, called Neurea, has been laid out.

Rivers.—The Macquarie, (which runs through the county), the Cudgong, Bell, Molong, and Turon. *Creeks.*—Cunningham, Meroo, Pyramul, Nubrygin, M'Donald, Piambong, Merrenda, and Warradugga. *Eminences.*—Two ridges of mountains run from east to west, of which the most prominent elevations are Corcalgong, Bocobel, Boiga, and Yammin.

ROXBURGH COUNTY, north of Bathurst and Westmoreland counties, is bounded on the north by the Cudgong river from the Mount Durambang, by Canguddy creek, to the junction of Cudgong creek, on the east of Mount Bocobel; on the west by that creek, by Cunningham's creek, and by the Turon river to the Macquarie river, which latter, along with the Fish river, to the junction of Solitary creek, forms the southern boundary; on the east by Solitary creek to Honeysuckle hill, and thence by the dividing range to the head of Cook's creek, and by the creek and the Cudgong river and Umbiella creek, to Mount Durambang. Length, fifty miles; breadth, forty miles. The county is very hilly, but has rich pasturage, some fertile spots, and is well watered. *Chief town*—Kelso, on the Macquarie river, 112 miles from Sydney.

Rivers.—Macquarie, Cudgong, Fish, Turon, and Capertee. *Creeks.*—Warragunnie, Tabraboucha, Umbiella, Cook's, Coolamigel, Roundswamp, Antonios, Solitary, Jabez-Jabeck, Winburdale, Cunningham's, and Mallamurra. *Eminences.*—Tayan Pic, which is visible from the Wol-lombi hills, in Northumberland, distant forty miles, and also from the Honeysuckle hill, on the Bathurst road, forty miles distant: hence this elevation became a well-known point in the trigonometrical survey by Sir Thomas Mitchell, of the settled districts in New South Wales. The other eminences are Mounts Rankin, Ovens, Clاندulla, or Marsden.

COOK COUNTY, adjoining Cumberland, is bounded on the north-east by the Colo

river, which is also called the second or lower branch of the Hawkesbury; on the north by the rocky dividing range, extending east and west, between the rivers Hunter and Hawkesbury, and forming the south boundary of the county of Hunter; on the west by the range dividing the waters to Honeysuckle hill; and hence to where the Mount Blaxland road crosses Cox's river; on the south-west by Cox's river; on the east by the Warragamba, Nepean, and Hawkesbury, to the junction of the lower branch, as above mentioned; it is in length sixty miles, and in breadth forty-four miles. A great part of Cook county is occupied by the Blue Mountain range, across which the fine road from Sydney to Bathurst lies. Table land, from 2,000 to 3,000 feet high, abounding in picturesque scenery, occupies a considerable portion of the county. Emu plains, and several fertile valleys, compensate, in some measure, for the large quantity of rocky soil in this county. At King's table land (2,727 feet above the sea) the view is magnificent; for eighteen miles from the commencement of the ascent of the Blue mountains at Emu plains, the slope is gradual; from thence to the twenty-sixth mile is a succession of steep and rugged hills, some almost so abrupt as to deny a passage across them to King's Table Land, on the south-west of which the mountain terminates in lofty precipices, at whose base is seen the beautiful Prince Regent's glen, about twenty-four miles in length. From Mount York (3,292 feet high) the view is magnificent—mountains rising beyond mountains, clothed with impenetrable forests, with stupendous masses of rock, forming buttresses, in the foreground. The Vale of Clywd, so called from its resemblance to a vale of the same name in North Wales, Britain, is 2,496 feet above the sea, and runs along the foot of Mount York, 796 feet below the summit of the mountain, extending six miles in a westerly direction. The soil is rich, and the scenery very beautiful. In the valley, near the inn called the *Weather-boarded Hut*, on the road to Bathurst, there is a line of perpendicular cliffs, of immense height, which has a small cataract termed *the Falls*. At the point where the rivulet leaps over the precipice, the cliffs recede considerably, forming, according to Lang, two bold headlands of fearful elevation, and enclosing a basin of prodigious depth, in which the tops of lofty trees are seen several hundred feet below the preci-

pice. When the rivulet is flooded, the scene is magnificent; in other seasons, the waters are separated into distinct atoms, and are precipitated to the bottom like innumerable particles of frozen snow. The great western road from Sydney to Bathurst, over Mount Victoria, was originally very imperfect and steep. According to the design of the surveyor-general, Mitchell, in 1827-8, recommended by a road commission in 1829, a new line over the Blue mountains was commenced in 1830, and three gangs of convicts, consisting of 250 prisoners, under colonial or secondary sentences, with ankle fetters of seven to ten pounds each, were located near the intended road, in a stockade prepared for the purpose, with huts around for a guard of soldiers. The dense forest that covered the projected road was first cleared and burned, chasms were filled by immense masses of blasted rock; and walls of extraordinary thickness, and of a height of fifty to eighty feet, connected one precipice with another, and preserved a continuous or gradual scale of declivity; a defile was cut through the solid rock, of twenty to thirty feet deep; and finally, in 1832, the *Victoria Pass* was opened to the public, in due form, by the governor, Sir R. Bourke.

Towns.—Hartley, seventy-eight miles from Sydney, the chief town, is built on the west bank of the river Lett; the other towns are Emu, Wilberforce, Bowenfels, Rydal, and Colo. Emu township, thirty-five miles from Sydney, is laid out on the rising ground of Emu plains, behind the government farm, on the banks of the Nepean. The seat of *Edenglassie*, (called by Sir Francis Forbes, the late chief justice of New South Wales, after the family seat in Aberdeenshire, North Britain, of the lamented Sir Charles Forbes, Bart.) is about two miles up the river, on a fine reach, capable, says Mr. Wells, of "floating a dozen men-of-war." *Rivers*.—Grose, Colo, Cox, Nepean, Hawkesbury, Lett, and Warragamba. *Creeks*.—Wheeny, Meroo, Billong, Currency, Wollinganby, Bowen, Wolgan, Farmer, and Cook. *Eminences*.—The Blue mountains, Honeysuckle hill, Mounts Walker, Clarence, Victoria, Tomah, King George, and Hay.

NORTHUMBERLAND COUNTY, which intervenes between Hunter county and the sea, is one of the finest in the colony; it is bounded on the north by the river Hunter, and on the south by the Hawkesbury, to the sea-coast, which forms the eastern

boundary; and on the west by Wollombi brook, the junction of Parson's creek, by that creek to its head in the range dividing the waters of the Hawkesbury from those of the Hunter, by Warring creek, to its junction with the Macdonald river, or lower branch of the Hawkesbury, and by the said lower branch to its junction with that river. The length is sixty-one miles, breadth fifty. There are some fine elevations, commanding extensive prospects; but the general aspect is a series of undulations and elevated plains, intersected by numerous creeks, streams, and rivulets. The river Hunter affords a means of water communication throughout its northern boundary, and along its alluvial banks, some of the most flourishing farms and estates in the colony are situate. Yarramalong is a beautiful vale, distant twenty miles from Brisbane water, and watered by the Jiliby-Jiliby creek. Lake Macquarie, or Awaba, twelve miles south of Newcastle, is the largest lake in New South Wales, and famed for the beauty of the surrounding scenery. The entrance is at the head of "Reid's Mistake," distant 105 miles from Sydney. Newcastle (native name Mulu-binha), in $32^{\circ} 55' 50''$ S., about eighty miles from Port Jackson, is the maritime town of the county, and fast rising into eminence, not less by reason of its position at the commencement of the navigation of the Hunter, than from the locality of the coal mines, now actively worked by the Australian Agricultural company. Maitland, on the Hunter river, at its junction with Wallis creek, 127 miles from Sydney, and twenty-five miles from Newcastle, is the seat of the county executive, and a neat and flourishing settlement. The town is divided into East and West Maitland, built on each side of Wallis creek. There is a spacious court-house, a large gaol, several churches of England, Presbyterian, Wesleyan, and Roman catholic temples of worship. The Roman catholic chapel is a handsome structure. East Maitland is better supplied with water than West Maitland. Coal, of excellent quality, is worked on both sides of Wallis creek, and delivered to the consumer at six shillings per ton.

Morpeth, originally called the Green hills, is a rising town, picturesquely situated at the head of the navigable part of the Hunter river, twenty-nine miles by water from Newcastle. It contained, in 1848, a church and parsonage, a Wesleyan chapel, a ladies' school, and two day schools; five inns, a steam flour-mill, soap and candle manufac-

tory, some excellent shops, thirty-seven stone and brick buildings, and 117 wooden tenements. The extensive wharf and stores of the Hunter River Steam Navigation Company are at Morpeth, and throughout the greater part of the year there is a daily steam-packet communication with Sydney, with which also there is a considerable trade in sailing vessels. About two acres on the bank of the Hunter river are used as a government wharf. Good coal is found in the vicinity. Morpeth, like Boyd, and other towns in New South Wales, is built on land belonging to private individuals, who naturally seek to improve the value of their property by promoting the formation of towns in eligible places.

The extraordinary progress of the colony of New South Wales is evidenced in the manufacturing industry evinced in many of the towns. In Maitland, for instance, we are told, that—

"Porter and ale of excellent quality are now brewed there. The Irawang pottery is so good, that the demand greatly exceeds what can be produced, from the paucity of good workmen. Tweed is improved so much, that it sells in Sydney to such an extent that the district market is often very inadequately supplied, though two establishments are in active operation. The tobacco manufactured in Maitland and the district is nearly all sold in Sydney, and the demand for it is gradually increasing. The growth of the vine is greatly extending, though but little wine has been yet brought into market; manifest improvement is however visible in what is brought forward. Leather and soap are produced to a great extent, and of excellent quality. Iron, salt, and a variety of other articles, are rapidly improving."

The *Maitland Mercury*, published bi-weekly, is an excellent provincial newspaper.

Towns.—Newcastle, Maitland, Singleton, Morpeth, Wollombi, Hexham, East and West Gosford, and St. Alban's. *Lakes*.—Macquarie, Brisbane Water, Tuggerah Beach, and Wamberall.

HUNTER COUNTY, north of Cook county, and separated from the sea by Northumberland county, is bounded on the north by the river Hunter, and also by the Goulbourn to the junction of Widdin creek; on the west, by Widdin creek to the Coricudgy mountain, by the range thence to the Durambang hill; on the south, by the Colo river to the Hawkesbury river; on the east, by the Hawkesbury to the north of the Macdonald river, or lower branch; and on the north-east, by the Macdonald river to the junction of Wareng creek, and by Wareng and Parson's creeks, and the Wollombi creek, to its junction with the Hunter river. Length,

from north to south, seventy-one miles; breadth, east to west, forty-seven miles.

The aspect is mountainous, and occasionally very wild. The chief town, called after the plains in which it is situated, Jerry's, is on the Hunter river, 122 miles from Sydney.

Rivers.—Hunter, Goulbourn, Macdonald, Wollombi, and Colo. *Creeks.*—Webb's, Parson's, Wollum, Putty, Widdin, James, King, Greig, and Doyle. *Eminences.*—Nullo, Coricudgy, Monundilla, and Wambo.

PHILLIP COUNTY is bounded on the north by the river Goulbourn, from its source, near the head of Wialdrar creek, to the junction of Widdin creek; on the north-west, by the Cudgegong river, from its source, at Mount Durambang, to Wialdrar creek. Its length is fifty-three miles, and its breadth forty-one miles. Rytstone is the chief place.

Rivers.—Goulbourn, and the Cudgegong. *Creeks.*—Widdin, Cooyal, Pipeclay, Lawson, Moorlarben, Wilpingong, Bylong, Barrigan, and Wollar. *Eminences.*—Pomary, Runker's Peak, Cox's Crown, and Mount Penny; but these are only hills of inconsiderable height.

BLYTH COUNTY, bounded on the north by the Liverpool range from Mount Mac Arthur to the head of Coolaburragundy river, by this and the Talbragar river to the junction of a small creek two miles east of Balara; on the west by a connected ridge extending from the head of the creek aforesaid to a hill five miles north of the junction of the Bell with the Macquarie river, and thence by a line south to the Macquarie; on the south-west by the Macquarie to the junction of the Cudgegong river, and on the south-east by the Cudgegong river; and Wialdrar creek, to the source of the latter in the dividing range at the head of the Goulbourn river, thence by the Goulbourn and Krui river to Mount Mac Arthur or Liverpool range. Length, about eighty miles; breadth, forty miles. There are several rich plains, viz., Harrison's, Krui, Nandoura, and Welling-ton valley; the most prominent mountains are Mooa, East Bluff, Pandora's Pass, and Gobalion. Ailsa, on the Krui river, is the county town; the others are Dalkeith and Montefiores.

Rivers.—Macquarie, Goulbourn, Talbragar, Erskine, Krui, and Cudgegong. *Creeks.*—Coolaburragundy, Teeree, Four Mile, Cook-abulgo, Munmurra, Peters, Derrinderry, Stony, Krui, Moons, and Wildra.

BRISBANE COUNTY is bounded on the north-east by Hunter river, from its source in lat. $31^{\circ} 46'$, to the Goulbourn river, and

thence to the Krui river; on the west by the Krui river to its source at Mount Mac Arthur or Moan in the Liverpool range; on the north-west by the Tinagroo and Temi mountains to the head of the Hunter river. Length, ninety miles; breadth, forty miles. The aspect of the county consists of several ranges of table-land, with occasional plains and peaks; one, Mount Wingen, or the Burning Mountain, in $31^{\circ} 54'$ S. lat., and $150^{\circ} 56'$ E. long., described in the Geological section, has an elevation of 1,500 feet above the sea.

Towns.—Murrurundi, chief, on Page's river; Haydonton, Scone, Merriwa, Cassilis, Invermein, and St. Aubin's. *Rivers.*—Goulbourn, Hunter, Page, Isis, Krui, and Werrenul. *Creeks.*—Krui, Moon, Coulson's, Bow, Gummum, Hall, Giant, Way-bong, Dartbrook, and Kingdon. *Plains.*—Bow, Krui, Gummum or Gammon Plains, 150 miles from Sydney. *Eminences.*—Mount Tinagroo, Tereil, Murulla, Oxley's peak, and Tomarra.

DURHAM COUNTY is bounded on the east by the Williams river to its source, and thence by the Mount Royal range to the head of one of the branches of the Hunter river in lat. $31^{\circ} 46'$; and by that river on the west and south to the junction of William's river above-mentioned. Length, sixty miles; breadth, fifty miles. Fertile and well watered. The fine district of Patrick's plains includes the middle portion of Durham county, the north-east portion of Hunter county, and the north-west portion of Northumberland county. Paterson, the county town, is situated on the river of the same name, distant 130 miles from Sydney. Other towns—Muswellbrook, Seaham, Clarencetown, Dungog, Hinton, Gresford, Merton, and Camberwell.

Rivers.—Hunter, Williams, Patterson, Allyn, and Bouchell. *Creeks.*—Stewart's-brook, Sandy, Muswell, Saltwater, Fay, Fall, Carrow, West, Glendon, Myall, and Lamb-valley. *Eminences.*—Mounts Royal, Wollen, M'Arthur, Drying, and Tangorin.

Dungog, one of the towns or villages in Durham county, is noted for its position and prosperity. It is situated on the banks of William's river, a considerable way below the Chichester river, both of which streams are famed for their clearness and purity. The village covers a succession of ridges which are said to "fall into one another like the fingers of clasped hands." These ridges are thinly wooded, and government has preserved

ample space for promenade and circular pleasure-grounds near the beautiful reaches and bends of the river. There is a church, two schools, two large inns, a steam flour-mill, court-house, horse-barrack, horse-breaking and training stables, boiling-down establishments, several good dwelling-houses and neat farms in the vicinity; a cheerful peal of church bells, and a band of rustic musicians. "From one end of the town," says Mr. Wells, "to the other, the voice of children and the hum of industry fall upon the ear." The country around is wildly picturesque.

GLOUCESTER COUNTY, bounded on the west by the Hunter river, on the south-west by William's river to its source, and thence by the Mount Royal range bounding the county of Durham to the principal source of the Manning river; on the north by the Manning river to Farquhar inlet, south-east by the sea-coast. Length, eighty miles; breadth, sixty-five miles. The northern parts of the county are mountainous, but there is much good land both for grazing and agricultural purposes. At the entrance of Port Hunter or Newcastle bay, there is a small but rather lofty island, called Nobby's Island, somewhat resembling the Craig of Ailsa, or the Bass Rock on the coasts of Scotland, apparently composed of indurated clay supporting a stratum of sandstone, over which there is a stratum of coal, the clay appearing to rest on a substratum of silicious substance. The indurated clay consists of thin laminæ, into which it may be easily separated with a knife, and which present innumerable impressions of vegetables. Dr. Lang says—"I have seen such impressions in specimens of the clay obtained at a height of fifty to a hundred feet above the level of the sea. It appears indeed to consist of nothing else but masses of vegetable matter, which, at some former period in the history of the earth, must have floated in a solution of clay. Nobby's island has evidently been originally joined to the mainland; the intervening channel to the southward being still narrow, shallow, and rocky, and the successive strata of which it is composed corresponding with those of the main."

The features of the coast about Port Stephens are different from those seen to the southward. A number of conical hills, four to six hundred feet high, are visible; two of them—Wacaba and Tomare, constitute the entrance points of Port Stephens—which is a large estuary, fifteen miles in length, and

contracted near the centre to the breadth of a mile, and subsequently further lessened by a woody islet. Nearly two miles within the estuary, on the west shore of the harbour, is the town of Carrington, belonging to the Australian Agricultural Company; and half-a-mile to the westward is Taklu, the charming residence of the superintendent, situated on the crest of a green grassy slope, over which are scattered numerous small bushy lemon-trees, the deep verdure of their foliage interspersed with golden fruit, contrasting with the light-green carpet from which they sprang.*

The estate of the Australian Agricultural Company in New South Wales, comprises an area of upwards of a million of acres, and consists of three separate extensive tracts, situated about 100 miles north of Sydney, between the 32nd and 33rd parallels of south latitude, approached by the fine harbour of Port Stephens, which forms its southern boundary. The southernmost of these tracts is designated the Port Stephens grant; north-west of Port Stephens is the Liverpool Plains grant; and the north-east of Liverpool plains is the Peel's River grant. The Port Stephen's grant is estimated to contain 464,640 acres, and to extend between twenty and thirty miles inland from the sea coast; bounded on the north by the "Manning," a river of comparative magnitude, commencing a little above the head of the navigation, and extending inward or westward twenty miles; on the west by a line south, separating the company's lands from those reserved by the crown for ecclesiastical and educational purposes; on the east by a parallel line separating the same from the crown lands; and on the south by the Karuah river and Port Stephens, a harbour second only to that of Sydney or Port Jackson on the eastern coast of New Holland. The general appearance of the land is hilly, with well-watered valleys, of good soil and pasture, and with abundance of the best description of timber, for building, fencing, and rural purposes generally. The character of the soils necessarily varies with the formation, but they are all capable of growing grain, (maize and millet luxuriantly,) tobacco and cotton, the vine, olive, orange, and citron, and almost every variety of fruits, even to the banana, which flourishes in sheltered situations, and within the influence of the sea air. The valleys, though narrow, afford sufficient scope of rich alluvial soil on the

* *Stokes's Voyage in H.M.S. Beagle.*

banks of the streams for all the purposes of agriculture; the receding and higher lands being well calculated for arboriculture and vineyards; whilst the loftier ranges are clothed with a short, sweet, and nourishing grass, for the pasturage of sheep or cattle—and it is remarkable that the wool produced from the Company's sheep depastured on those hills near the coast, has invariably, from its fineness of texture, realised nearly sixpence per pound more than that produced from a similar breed of sheep fed in the interior, where the grass is more rank. A considerable portion of the lands in this county belonging to the Australian Agricultural Company is of excellent quality, and has been rendered very valuable by the well-directed labour and capital bestowed upon it. Count Strzelecki thus expresses himself concerning the agricultural capabilities of this part of New South Wales and the progress of cultivation:—

"That portion of the country which, from its system of working, and range of tillable land, deserves to be included within the agricultural district, is confined to the valley of the Karuah, which is limited in the extent of its cultivated, but not of its cultivable land, and of which the best tracts are in the possession of the Australian Agricultural Company; to the valley of the Hunter, composed of the confluent valleys of the Goulbourn, Pages, Patterson, and Williams rivers, &c.; the valley of the Parramatta. * * * In these localities, a good many farms are in a very forward state; many exhibit remarkable improvements, and some display only partial attempts, all of which are, however, in the right direction. The farms of the Australian Agricultural Company at Stroud and Booral, the most northern farms of the colony, may be regarded as the first in the rank of improvements. The farm buildings are of the best construction; the tilled lands are almost entirely clear of timber and stumps, well fenced in, well ploughed and worked, and presenting, on the whole, gratifying proofs of well-bestowed capital and labour.

"The orchards and vineyards of the company at Tahlee (Port Stephens), which produce the choicest grapes, oranges, and lemons, are not less worthy of notice. It is this orchard which shews most forcibly the extensive range which the beautiful climate of New South Wales embraces in isothermal lines; as there the English oak is seen flourishing by the side of the banana, which is again surrounded by vines, lemon and orange trees of luxurious growth. To the southward of Port Stephens are a series of thriving farms, spreading along the Goulbourn, Pages, Hunter, Patterson, and Williams rivers, which comprise an agricultural district of 2,000 square miles in extent. The excellent harbour of Newcastle (in Northumberland county), good water and tolerable roads, a coal mine, a soil well adapted for wheat, barley, turnips; the vine and European fruits, and a situation the most favourable to the application of irrigation, render this district one of the richest and most important in the colony."

The little river Karuah, flowing into the north-west corner of Port Stephens, is

navigable for twelve miles, to a place called Booral, where all goods are landed for the Company's stations up the country. Mr. Ebsworth, the treasurer, resides there in a charming cottage almost covered with roses and honeysuckle, and commanding two picturesque reaches of the Karuah. To this gentleman, and to his cousin, Mr. Henry Ebsworth, many years the faithful secretary of the Australian Agricultural Company, great credit is due for the careful superintendence evidenced in the practical working of the judicious and equitable system adopted by this association. Near the town of Gloucester in this county, is an abrupt range of densely wooded hills, called the "Buckets," which rise to a height of about 1,200 feet above the plain, their summits crowned by precipitous masses of naked rock of fantastic contour, not unlike the castled crags of the Rhine. The situation of Gloucester village is very picturesque; it is a large cattle farm belonging to the Australian Agricultural Company. The village of Stroud, not far distant, is a horse-station of the company: its English character is exemplified by the neat little gardens belonging to the mechanics in the service of the Australian Agricultural Company, and by the cottages covered with roses and honeysuckle. [Further details in Supp^t.]

On the crest of a range of hills in this county, overlooking some wooded lands belonging to the church of England, a singular natural phenomenon has been lately discovered: the front of the line of hills "strikingly resembles the ruins of a fortress: the masses of rent rock are dotted with vast balls, half fixed, and of the exact size of cannon balls: they are easily displaced, leaving a socket, as if they had originally been plunged there by artillery. The balls are very heavy, of a sparkling granite, surrounded in the centre by a white flimsy circle, which it was found impossible to chip." * Specimens of these balls have been sent to the British Museum and to the Geological Society of London.

Towns.—Raymond Terrace (the chief); Carrington, on Port Stephens's harbour; and Stroud, on the Karuah river. *Rivers.*—Manning, Williams, Chichester, Gloucester, Barrington, and Karuah. *Creeks.*—Tilligerry, Serpent, Limeburners, Onall, Pipe-clay, and M'Arthur's. *Eminences.*—Mounts Tallowah and Kanghat.

* *Geographical Gazetteer*, by W. H. Wells, Esq., p. 184. Sydney, 1848.

MACQUARIE COUNTY is bounded on the south by Manning river, from Farquhar's inlet to its confluence with the Barnard river; on the west by a line from the said confluence to Mount Sea-view, and thence by a line to Kippara, a pass in the range dividing the waters of the M'Leay river from the waters of the Wilson river; on the north by that range to the source of the south branch of the Maria river, and thence by that stream to the first section line in the parish of Kalateenee, west of the east boundary of that parish, thence by that section line to the M'Leay river; on the north-west, by the M'Leay river to its mouth, inclusive of the islands; and on the east, by the sea coast, which is picturesquely marked by Crescent head, Point Plomer, Tacking point, Indian and Crowd heads. The general features of the county are hill and dale, with open forest or grass land, lightly covered with good timber, and free from inundations. Captain King, speaking of this county and the adjacent districts, says, "there are here twelve million acres, in which it is difficult to find a bad tract, and they are in general watered with clear small streams." There are several elevated mountains in the county, viz.—the Three Brothers, Cairncross, Comboyne, Cocome-rico or Mount Sea-view, Kippara, Colapota-tamba, and the Brokenbago range, which latter divides the basin of the Hastings from that of the Manning river, and is covered all over with a dense forest. On the highest summit of this range, a tall pinnacle of naked rock shoots up perpendicularly above the trees like a church steeple. In some parts of the county, for instance, to the north of the river Manning, there are extensive plains; those called the "Jamaica plains," have an intensely green verdure, as contrasted with the more yellow tinted green of the grassy forest hills. Some large flats are covered with high grass, and timbered by large blue gum and "tea trees," standing widely apart from each other. At the junction of the Manning with the Gloucester river, the scenery consists of ranges of hills either very lightly wooded and grassy, or else covered over with brush timber and entangled vegetation. Most of the park-like hills have rounded conical summits; one heavily wooded range on the south bank of the river is crowned by huge masses of rock overgrown with creepers, which resemble the ivy-clothed battlements of some ancient fortress. Between the Wilson and the

Hastings river, is a very thickly wooded undulating country, tolerably grassy, and intersected by moist tea-tree flats and sedgy hollows. The country at the junction of the Hastings with the Maria river, has a fine appearance, as the reaches of the Hastings are of great length, and have an uniform breadth of about a quarter of a mile. The handsome villa of Dr. Carlisle is on the right bank, and on the left, a pretty cottage with a flourishing garden of vines and fruit trees. The Three Brothers rise majestically near Indian head, their lofty summits overtop all the woody heights by which they are encircled, and command an extensive inland, as well as a broad sea view.

Port Macquarie (278 miles from Sydney, lat. 31° 25' 45" S.), the county town and the most important north of Maitland, is situated within the harbour on the south side of the Hastings river, and divided into East and West Macquarie, by Coolenbang creek. It is a harbour into which vessels drawing more than nine feet of water cannot safely enter; but there is good anchorage outside, and the shore is not dangerous. The town is well built, on a gentle rise; the houses generally of brick, surrounded by neat verandahs and trellice work; the streets broad, straight, coated with dark red gravel, and levelled like garden walks. A tall square church tower is conspicuously prominent in the highest part of the town. A group of magnificent trees encircles Port Macquarie, and extends along the banks of the river; to the west and north-west is a wide extent of forest country, and among the mountain ranges may be traced the windings of the valley through which the Wilson river flows. Mount Caoulapatamba is sufficiently near to render visible every tree on its grassy declivities, whilst the distant ranges at the M'Leay river, and the huge frowning mountain at the back of Cogo, are half dissolved in blue ether. The beauty and fertility of the land in this vicinity has been noted by several writers, especially the luxuriant vegetation of the coast, when approaching Port Macquarie; dense thickets of cabbage palms and myrtle trees extend down the gently sloping declivities, even within reach of the ocean spray, and every unwooded patch is covered with grass. The lofty forest, too, rises luxuriantly close to the sea, and the tufts of the rocks, the foliage, the verdure, are all of a warm mellow hue.

The other towns are Hay, Ballengarra, and Maria-Ville. Kempsey village, at the termination of the north boundary of Macquarie county, twenty-eight miles from the mouth of M'Leay river, has several good brick-built cottages, an inn, store, &c. A fine garden here, belonging to Mr. Sullivan, has fruit trees of all descriptions in greater luxuriance than is to be seen in any other part of the colony. The land in this neighbourhood yields good crops of wheat in dry seasons, and maize at the rate of 75 to 100 bushels per acre. One farm, belonging partly to Mr. Hodgkinson, which had been under the plough for six years, yielded two crops annually—maize, followed by either wheat, potatoes, sugar-loaf cabbages, or Swede turnips. The crops of cabbages and turnips cultivated for the pigs, were twice as abundant as good crops in England. Potatoes were large, but had an earthy flavour.

The principal agricultural farms in the county of Macquarie, are situated on the banks of the Wilson river—a tributary of the Hastings, and a never-failing stream flowing through a narrow valley;—they now form a continuous chain for about fifteen miles, and a very good road connects the whole of them with the town of Ballengarra, where the Wilson river becomes navigable for boats about twenty miles distant, by water, from the town of Port Macquarie. These farms are all composed of alluvial soil of excellent quality.*

On the banks of the M'Leay river, on the northern frontier of Macquarie county, the alluvial brushes which prevail on the lower part of the stream, are superseded where the stream ceases to feel the influence of the tide, by park-like forest ground, verdant rocky eminences, and luxuriant grassy flats of the greatest richness, lightly timbered with apple-trees (so called by the colonists, from the resemblance of the foliage to the English fruit-tree of that name; the tree is the *angophora lanceolata*), whose gnarled branches and light green foliage, render it the most picturesque forest tree in Australia. Several small tributary streams join the upper course of the M'Leay; from the South Dongai creek, whose narrow valley consists of a border of alluvial flats covered with broad-bladed grass growing breast high,

and with a few large blue gum trees scattered so far apart as to offer no impediment to immediate tillage, which is carried on here by the squatters. Dongai creek is hemmed in on both sides by fertile ranges well clothed with grass, and lightly wooded; the scenery is described as very pleasing; the ranges rise in smooth round cones, and their sloping sides, covered with bright green verdure, contrast strongly with the dark glistening green of the brush vegetation, which occasionally invades some of the hills. The stream itself, says Mr. Hodgkinson, is of crystal brightness; it rushes rapidly through the glen, over a bed of large pebbles, and frequently forms diminutive cascades; "this, with the magnificent trees and beautiful flowering creepers, forming natural arches, with a glimpse of distant hills softened and blended with the deep azure of an Australian sky, cannot fail of affording gratification to any one who can admire nature unadorned by art."

Rivers.—Hastings, Wilson, Maria, Manning, Brumo, Ellenborough, and Forbes. *Creeks.*—Tymbank, Piper's, Limeburner's, Pappinburra, Limestone, Koolobungan, Kin-dee, and Cathic. *Lakes.*—Many, but of small extent; principal—the Innes, Queen's, Watson, and Taylor.

The climate of this division of New South Wales is said to be more agreeable than that of Sydney; the mountains approach nearer to the coast, collect the vapours from the sea, and cause more frequent rains; in summer, especially, the heat is mitigated by many heavy thunder showers. It is almost entirely exempt from the hot winds, which are frequent during the summer months, in the more southern parts of the colony; moreover, the north-eastern part of New South Wales, between the great main range dividing the eastern and western waters and the ocean, has never experienced the long droughts which appear to occur septennially in the central and western districts. The greatest drought experienced in the Port Macquarie neighbourhood, was in 1841-2, when the natural grasses were quite desiccated, and the whole country continually in flames, the only young grass for the cattle and the sheep being in the flats; but the water-courses were as full of water as ever; and the wheat crops—which had failed near Sydney—yielded abundantly on the alluvial farms on the banks of Wilson's river—in some places averaging forty bushels of sixty-five pounds each, to the acre.

* Hodgkinson's *Australia from Port Macquarie to Moreton Bay*; to which work I am indebted for much recent information concerning the topography of this portion of the country.

From Moreton Bay to the Manning river, the southern boundary of the county of Macquarie, a distance of about 270 miles along the coast, there are nine rivers, viz.—the Brisbane, Tweed, Richmond, Clarence, Bellengen, M'Leay, Hastings, Camden Haven creek, and the Manning. Dr. Lang, speaking of this region, which he terms *Cook's-land*, says, "I can fearlessly challenge any European geographer to point to any tract of country of equal extent, and within the same parallels of latitude, in either hemisphere, on the coast of which there is a greater number, either of streams of water, or of rivers available for inland navigation."

Several other counties have recently been proclaimed (see map of New South Wales), to the northward and eastward of Macquarie county [which I hope to notice in Supplement], some description of the rivers flowing through this tract of country, viz.—the M'Leay, Nambucca, Bellengen, Clarence, and Richmond rivers, will be found at p. 489. The country at the base of the main range dividing the basin of the M'Leay river from that of the Nambucca, is generally grassy forest land, thickly timbered with gigantic black butt gum trees and other eucalypti, abundantly watered with numerous permanent chains of water-holes and gravelly water-courses in brushy hollows. From the summit of an elevated range extending to the westward, through Dudley county, in an undulating outline of conical summits, a magnificent and extensive view is afforded; to the westward, amidst a confused mass of mountains rising beyond mountains, covered with forest, the eye can trace the deep, narrow, brushy valleys of the streams forming the Nambucca, curling into the deep mountain recesses. In the north-west direction, tier beyond tier rose in serrated ridges of steep, high conical summits, the view bounded by the dim blue outline of a level crested range of considerable altitude. To the east the eye embraces the dense forests and swamps on the Nambucca river—the silvery stream of its tranquil reaches, and the blue surface of the Pacific, twenty-five miles distant. Towards the foot of these different ranges are grassy slopes—in some places, dwarf palms and ferns have usurped the place of grass—in others, magnificent cedar groves—and on the banks of creeks, enormous wild fig-trees.

A range of mountains characterized by a chain of conical summits, with an average height of 2,500 feet above the sea, divides the

Bellengen river from its tributary Odalberree. This range is composed of soft micaceous talc, coated with a deep soil, and covered on the summit and steep slopes, with luxuriant grass. For twenty miles the summit of this razor-back ridge was found too difficult for riding, the undulations being so steep and frequent. From the top was seen the narrow glen of the Bellengen river; immediately opposite to which, on the north side of the river, rises a gigantic range of about 5,000 feet high, with perpendicular buttresses of 3,000 feet elevation. The outline of this range is a level table land, broken near the coast into undulations, with steep conical summits. A beautiful grassy forest immediately overlooks the Bellengen river, where there is much alluvial land, with brush, cedar plains, and forest flats. The richness of the soil may be judged of by the great size of the cedar and rosewood trees on its banks. The casuarina also grows to such an uncommon height, and the foliage assumes such an unusual form, that it might be mistaken for a species of pine. On the small clear plains a coarse-bladed grass grows more than two feet high, and appears like small wheat fields; the grassy flats are principally wooded by that species of eucalypti called forest mahogany. Mr. Hodgkinson was unable to explore much of the country near the Bellengen river, as in a straight line of ten miles, he had to cross and recross the stream (little inferior in size to the Hastings river), no less than twelve times, on account of the steep, inaccessible forest banks, which formed tangents to the convex lands on either side. He was unable, for want of provisions, to explore the upper course of this "romantic river," which possibly may be found more available for the settler than its explorer supposed.

The Bellengen river is separated from the Clarence river by a bold range of abrupt lofty mountains heavily wooded to the summits, and of a "beautiful colour;" the country between the two rivers consists of verdant plains, grassy forests, steep, brushy ranges, and some rocky water-courses. The Bellengen range of mountains comes near to the sea coast, where it is 1,500 feet high—at eight or nine miles inland, upwards of 3,000 feet, and gradually increasing in altitude as it recedes from the ocean. This range appears to be the highest and least broken lateral offshoot from the great main chain which runs parallel to the Pacific, and it coincides with the Nundewar lateral range

of Sir T. Mitchell, which is given off on the interior or western side of the chain. Near the mouth of the Bellengen river a low range of hills extends along the coast, past the Solitary Islands; the country between these hills and the sea appears to be grassy forest land.

To the northward of Dudley county, through which the Nambucca and Bellengen rivers flow, are the counties of Clarence and Raleigh, divided by the Clarence river. The country available for grazing on the banks of the Clarence is much more extensive than that on the M'Leay river, as the mountains do not attain any great elevation near the coast, and the country is generally level, not only on the banks of the Clarence, but also near its tributaries. There are, consequently, numerous settlers and "squatters," with their flocks and herds, in this neighbourhood. Wool-drays can descend with comparative ease from the rich district on the table land opposite the sources of the Clarence river, to its navigable estuary. The brushes near the mouth of the river are interspersed with the beautiful variety of timber known as the "Moreton Bay pine."

RICHMOND COUNTY is watered by the Richmond river, which at its mouth has scenery resembling that at the embouche of the M'Leay river, namely, mangrove scrubs, tea tree, and swamp oak thickets, which cover the low flats near the mouth of the river; higher up the stream the alluvial land is diversified by brush abounding in cedar and pine, clumps of bangolo palms, reedy swamps, small rich plains, and highly wooded forest flats of great richness. The rest of the county, so far as is known, consists of very thickly timbered forest land of the greatest fertility. Mr. Hodgkinson thinks there are few rivers in New South Wales where so much good available land exists unbroken by densely wooded ranges and ravine. Of the next northern county, the Rous, watered by the Tweed, we know little more than that the hills are thickly wooded.

STANLEY COUNTY comprehends that part of New South Wales, lying between the parallels of 27° and 28° S. lat., bounded on the east by the Pacific, and on the west by the coast range of mountains which forms the dividing shed of the waters which flow towards the ocean, from those which flow into the interior towards the Darling river. Length, from north to south, sixty miles; breadth, sixty. The general aspect consists

of mountains and plains; the latter are very rich, and include Normanby, Laidley, Innes, and Letitia plains.

In lat. $28^{\circ} 2' 40''$ S., long. $152^{\circ} 24' 20''$ E. fifty-four miles south-west from Brisbane town, and sixty-four miles in a direct distance from Point Danger on the sea-coast, there is a remarkable gap in the great dividing mountain range, which was discovered by Mr. Cunningham in 1827, and subsequently explored in 1828, during an expedition which he made from the Limestone hills (now called Ipswich), on the Bremer river, for this very purpose. This important passage from the coast, through a formidable mountain barrier, commences near a valley, from whence there is an ascent through a low forest ridge at south, bending S.S.W. and S.W. through the first mile and-a-half. The acclivity is very gradual, and in another half mile the ridge takes a decided bend to the westward, its surface becomes wide, and presents an open patch of forest ground, timbered chiefly with oak and apple-trees. The ridge again narrows, but the declivity is progressively easy; patches of brush clothe its sides, as also the gullies falling from it, leaving the back-ground clear of wood, open, and grassy. At about two-and-a-half miles the ridge bends to the north of west, and immediately the summit of the pass appears, bounded on each side by stupendous heads, towering to the height of 2,000 feet, named Mounts Mitchell and Cordeaux. Here the ascent becomes steep for 400 yards, and a level surface is reached at the top of the pass or gap, clothed with a thick brush of plants common to the Brisbane river. From this point the waters may be seen falling westerly to Miller's valley beneath. The country contiguous to the eastern entrance of this important means of intercourse between the lower coast line and the upper table land of Darling and Canning downs, and Peel plains, is very beautiful. Mr. Cunningham passed a tract between the gap and Ipswich, apparently part of the 50,000 acres comprising Normanby plains, of which he says—"Nothing can possibly exceed the richness and mellowness of its fine black soil; and certainly there is not, in any explored part of New South Wales, a more beautiful subject for the pencil of the artist than the landscape presented to the traveller from the centre of Bainbrigg's plains, to which no description of mine can possibly do justice." Bremer river, on which Ipswich is built, at ten miles from its mouth

has a tortuous course and a uniformity of breadth of thirty to thirty-five yards. Beyond Ipswich the river forms a fine natural basin of 100 yards wide; ledges of rocks fill the bed of the river, and separate the tidal salt water from the descending fresh mountain stream. At a few miles from the entrance of the gap, the rich flats and alluvial grounds are adorned with blooming vetch, called by botanists *swainsonia*, and with the *lotus Australis*, or "bird's-eye" trefoil, as also with a *geranium* and a *senecio*, frequently seen in Bathurst county. The grasses are chiefly those of the more southern districts of the colony. The "coral tree," with its splendid scarlet flowers, here grows to a height of thirty-five feet, with a smooth trunk, but thorny branches.

Brisbane, the county town, or the *settlement*, as it is still commonly called, is situated on an elevated ridge of considerable extent, on the north or left bank of Brisbane river, about twenty-five miles from its mouth. This town was founded as a penal settlement, and many substantial buildings were erected by convict labour, which, when the district was thrown open for free settlers in 1842, would, it was supposed, form the nucleus for a large population. These reasonable hopes were, however, frustrated by the pursuance of the same mistaken policy which, in so many other instances, has retarded the progress of the colony, £100 an acre being fixed as the minimum price of building allotments in the town of Brisbane. On the other side of the river, which is here nearly a quarter of a mile in breadth, building allotments were sold at a somewhat lower minimum price, and hence arose another small town, called South Brisbane, in contradistinction to the older settlement. A third town was established, by private speculation, at Kangaroo Point, a peninsula formed by a sharp bend of the river, situated exactly opposite to Brisbane town. This tract being regarded merely as country land, was disposable at the government land sales, at a minimum price of not less than a pound an acre, at little more than which it was purchased by Mr. (now Sir Evan) Mackenzie, and subdivided into building allotments, for those who wished to have a fixed place of residence in the neighbourhood; but could not afford, or did not choose to pay, £100 an acre for a building allotment on the other side of the river.* The population, which, united, might have formed one

* Cooksland—Dr. Lang.

respectable and flourishing town, is now scattered among three insignificant places, a consequence which has been the direct result of the system whose chief end was professedly *concentration*. According to Dr. Lang, there is much land of very inferior quality near Brisbane town, on both sides of the river, but particularly on the south side; the tract from Brisbane to Ipswich, or the Limestone hills, situated at the head of the navigation of the Bremer, a distance of twenty-five miles by land, and fifty by the two rivers, being absolutely sterile, with the exception of a small plain of a few thousand acres in extent, called Cowper's plains, about ten miles from Brisbane. In another place, however, Dr. Lang says, that for some distance above Brisbane the river is considerably wider than at the settlement, and where the banks are high and rocky, as is often the case in the lower part of its course, there is generally a considerable extent of level alluvial land on the opposite side, constituting what are called the *brushes*, in which the soil is of the richest description, and the vegetation much more varied and vigorous than on the forest-land, beyond the reach of floods. These flats are found along the whole course of the main river and its various tributaries, and in the higher parts of its course are both more frequent and more extensive than in the lower. Ipswich, or Limestone, is a rising town, well situated at the head of the navigation of the Bremer river, and on the direct route to the Darling downs, by Cunningham's gap. From Ipswich the Bremer pursues a tortuous course, between steep banks, for about twelve miles, to the Brisbane river. A small steamer now plies between the towns of Ipswich and Brisbane. The Bremer is subject to floods, and has been known to rise fifty-three feet above its ordinary level; but the Brisbane being considerably wider, the water, in times of inundation, escapes much more freely, and the floods on that river are, consequently, not nearly so high. Limestone plains, in the immediate vicinity of Ipswich, are a tract of land almost destitute of timber, of the richest and most fertile black mould. The distance to the foot of the mountains is only thirty-eight miles, and quite level throughout; at eighteen miles from Ipswich there are other plains, similar to those at Limestone, called Normanby plains, containing an area of from 40,000 to 50,000 acres.

The whole country bounded by Moreton

bay—a distance of about fifty miles from south to north—is well adapted for grazing and agricultural farming; the soil around the Glasshouses (peaked mountains, so called by Captain Cook, when he discovered and named the bay), is formed of decomposed lava, and very fertile. The indigenous timber is of great value—the *auracaria Cunninghami* or Moreton bay pine, and the *auracaria Bidwellia* or the Bunya-Bunya tree, have been already mentioned. The mulberry tree grows very luxuriantly. With regard to the adaptation of this locality to the cultivation of the vine, there appears much difference of opinion; but the periodical rains of January and February, coming as they do, just at the season when the fruit needs maturing by a hot sun, seems a great obstacle. The climate and soil appear well suited to the cultivation of the sugar-cane, cotton, arrow-root, tobacco, indigo, and other tropical products; and, according to Dr. Lang, is also admirably adapted for the production of every species of European grain, as well as of those peculiar to warmer climates; for as vegetation goes on without interruption all the year round, the farmer has only to select, for the growth of any description of grain, the peculiar season that will ensure the exact temperature required to bring it to maturity; the barley harvest, being the hardiest grain, comes immediately after the colonial winter, the wheat harvest at the commencement of summer, and the maize harvest so late as to give that inter-tropical grain the full benefit of the heat of summer. This latter crop is a never-failing one at Moreton Bay, yielding, on alluvial land, at the rate of eighty bushels an acre. The English potato, and the Indian or sweet potato, are both cultivated successfully*. The latter is very prolific, and is grown near Brisbane to the weight of eighteen, and even twenty-three pounds each. Coal is found in the neighbourhood of the Brisbane; and the fisheries of the extensive bay and coast may be made very profitable. By recent accounts, it appears that the colonists at Brisbane have commenced capturing the Yungana, called also

* The summer heat of Moreton Bay will, I think, prevent the extensive employment of European agricultural labour at this station; but under a well devised system, and with due encouragement, a large and valuable class of Chinese immigrants might be induced to settle at Moreton Bay, where they would soon become successful cultivators of sugar, cotton, mulberries for silk, tobacco, and other products suited to the soil and climate. The Chinese are now

the dugong or sea-pig of Moreton bay, for the purpose of extracting the oil from the animal; the oil procured in this way is highly spoken of, being remarkably pure and clear; about five gallons is obtained from each animal. The blacks are very expert in harpooning these animals, and they are passionately fond of the flesh, preferring it to any other kind of food.

The chief *Eminences* in Stanley county are Mounts Brisbane, Hallen, Forbes, Frazer, Edwards, Sampson, Cross, Melbourne, and Stephenson, Frenchplay peak, Tenthill, and D'Aguilar's range. *Rivers*.—Brisbane, Bremer, Stanley, Logan, Teviot, Lockyer, and Pumicestone. *Creeks*.—Coyar, Graham, Franklin, Yarril, and Downshire. *Towns*.—Brisbane (chief), on the Brisbane river; and Ipswich, on the Bremer river. *Harbour*.—The fine haven of Moreton bay; the adjacent islands of Moreton, Stradbroke, and Peel, belong to Stanley county.

Of the three islands which run nearly parallel to the coast, and form the haven termed Moreton's bay, Stradbroke, the most southern island, is thirty miles in length, and five in breadth; at its southern extremity is a sand-spit, parallel to the main land for twelve miles. North of Stradbroke is Moreton island, with a navigable channel between the two of a mile in width. Moreton island runs north for about twenty miles, with a breadth of three miles. The third or most northern is Bribie's island, termed Yareen by the natives; it is seventeen miles long, by two to three broad. There is a channel of eight miles wide, with five to six fathoms water, between Moreton and Bribie islands. These three islands are stated by Dr. Lang to be hopelessly sterile to seaward. Moreton bay, throughout its whole extent of sixty miles long by twenty miles wide, is studded with islands of various sizes, and at its southern extremity it gradually narrows to the appearance of a mere river.

CAVENDISH COUNTY, situated to the north-west of Stanley county, is divided on the south from Churchill county by Lockyer's creek, which is surrounded by extensive plains. Dr. Leichardt says: "I have seen

purchasing land at Sincapore, and cultivating it with their usual skill; thousands would emigrate from Amoy, if the local government of Australia gave them due encouragement. The table land above Moreton bay may probably be more adapted for European outdoor labour, but I certainly doubt the eligibility of Stanley county as a residence for the distressed needlewomen of London. [In the Supplement the location of Chinese in Australia will be noticed.]

some forty miles more of the district, and the more I see, the more I feel convinced that it is eminently fit for small settlers." Ridges of small elevation in this county, contain small concretions of carbonate of lime, which are equally found on Darling downs and on Liverpool plains, indicating a fertile country. Besides this description of soil, there are many flats between the primitive mountain ranges and the ridges where a bed of clay lies generally one-and-a-half to three feet below the surface. The forest ground resembles, at present, one uninterrupted oat or rye-field in harvest. *Antistheria Australis*, which grows from three to four feet high, is the predominant grass, and is burnt off from time to time, the ashes form a good manure by which the soil is enriched, the tuft enlarged, and a younger and more nutritious grass formed.

COMMISSIONERS' DISTRICTS, OR SQUATTING STATIONS.—Irrespective of the foregoing counties of New South Wales, there is a large extent of the colony divided into what are officially termed commissioners' districts, or "squattling stations," where the owners of sheep, cattle, and horses are authorized, by licences from the colonial government, to depasture their flocks and herds over certain tracts. From time to time these squattling stations are being converted into *counties*, as population increases and land is in demand for purchase. In the year 1848, the squattling stations in the Sydney portion of New South Wales were—

Districts.	Chief Places.
Bligh	Dubbo.
Clarence River	Grafton.
Darling Downs	Warwick.
Lachlan	Gundegai.
Liverpool Plains	Tamworth.
M'Leay River	Kempsey.
Maneroo	Cressbrook.
Murrumbidgee	Deniliquin.
New England	Armidale.
Wellington	Molong.

To begin with the southern districts of the colony. The Maneroo has been described in Auckland county.

The *Murrumbidgee squattling district* is situated between the left bank of the Murrumbidgee river on the north, and the right bank of the Murray river on the south; on the east it is conterminous with the Maneroo district. It is one of the largest and finest tracts in New South Wales; has extensive plains and swelling uplands, thinly

wooded, which increase in elevation towards the Australian Alps. The most prominent *eminences* are—Mounts Trafalgar, Battery, Friday, Aikin, Mingeroo, Majonbury, Janil, Talbingo, Kengal, and the Snowy Mountains, where the Murrumbidgee and Murray rivers have their source. The district is well watered by two of the largest rivers in New South Wales, and also by the Doomut or Tumut, Burnett's, and the Coodrabidgee; by the *creeks* Tingella, Yewen-Yewen, Nackie-Nackie, Aidelong, &c. Hamilton plains, on the south bank of the Murrumbidgee and Camden forest, watered by Tingella creek, are extensive and valuable tracts. Albury, advantageously placed on the Murray river, is the post town of the district. It is in the high road from Sydney to Melbourne, through Goulbourn, Yass, and Gundegai. This last-named town, 250 miles from Sydney, is situated on one of the flats of the Murrumbidgee, which is here as broad as the river Clyde at Glasgow; but, like all Australian rivers, subject to expansion from floods. On one occasion, in October, 1844, the Murrumbidgee rose more than forty feet above its ordinary level, and covered the parlour of the inn at Gundegai to the depth of four feet. The Murrumbidgee is here fringed with swamp oaks, which are not found on any river farther south. The banks and districts for many miles above Gundegai are occupied as grazing stations, and at intervals by small farmers.

Lachlan squattling district is situated between the right bank of the Murrumbidgee river, and the left bank of the Lachlan river. This large division of the colony consists chiefly of a series of undulations, with extensive plateaux, such as the Euryalean (between Mount Brogden and Jones hills), and Molle plains, on the south bank of the Lachlan. There are several *lakes*; the principal are—Quawingame, near the confluence of the Lachlan and Murrumbidgee rivers; Campbell's, Goorungutty, and Cudjallogong, or Regent's lake. The chief *eminences* are—Taylor's, Peel's, Macquarie's (or Coccaparra), Yerraraser, Goulbourn's ranges, Mounts Stewart, Gill, Watts, Myarong, Berabidgal, Matta, or Mannar (hill), Maude, Garrow, Meyrick, Balloon, Moriatta, Portesse, and Byng. The *rivers* are the Lachlan, Murrumbidgee, Yass, and Boorowa.

Sir T. Mitchell, speaking of the country near Jugion creek, on the right bank of the Murrumbidgee, on the road which leads towards Sydney, says—"The scenery at

various points of the river seen this day was very beautiful; its chief features consisting of noble pieces of water, umbrageous woods, flowering meadows, enlivened by those objects so essential to the harmony of landscape—cattle of every hue. Each meadow was already covered with the lowing herds, for which it seemed to be prepared." The traces of the industry of man are obvious in fences and substantial wooden houses, with their smoking chimneys, built in the most inviting parts of each cattle run. This region is thinly wooded with the gigantic Yarra eucalyptus, and it is one of the finest pastoral districts in the colony. Nothing definite is known of the Lower Darling River district, but the country appears to deteriorate the further it is explored westward of the great coast range. On that portion of the Lower Darling which is bounded by the Lachlan river, there is good pasturage and several stock stations.

Wellington district. — Adjacent to the counties of Wellington and Bathurst, and between the Lachlan and the Macquarie rivers, is a very fertile tract. The *plains* Wellington, Cannil, Baird, and Gullerong afford sweet pasturage. The *eminences* are Harvey's, Croker's, and New Year ranges, Mounts Coulabals, Laidley, Bugamel, Margang-Nangar, Amyot or Camerberdong, Melville, Allan or Wolga, Picor Talga, Hurds, Paccalang, Gundobillong, and Warranary. *Rivers* Lachlan, Macquarie, Byrnes, Kalinalungaguy, Yamerunna, Belabula, Bell, Molle, Mary, Elizabeth, Bogan or New Year creek, and several other creeks.

Bligh squatting district is bounded on one side by the Macquarie river, and on the north by the Liverpool range, as it extends to Warrabungle range. The pasturage is excellent, and it is well watered. The chief *eminences* are Mount Harris and Warrabungle or Arbuthnot's range, which comprises Loadstone hill, Mount Harrison, and Vernon's Peak.

Liverpool Plains squatting district (native name *Corborn Comleroy*) is bounded on the south by the Liverpool or great dividing coast range, on the east by the western extremity of the same great dividing range; on the north and west the boundaries are indefinite. This is the finest pastoral district in New South Wales; situated between two parallel mountain ranges, it is traversed at irregular intervals by narrow belts of forest which divide the plains into a series of natural parallelograms, and excellently

watered by the numerous rivers and creeks which run eastward and westward, and are the source of nearly all the streams to the northward of Sydney. The chief *eminences* are the Warrabungle, or the Arbuthnot range, which divide the Liverpool plains from Bligh district; the Great Liverpool range, the Green mountains, Vansittart hills, Pandora's Pass, East Bluff, Mooan, Mac Arthur, Tereil, Murulla, Temi, Spear range, Breeci, Dinbundie, Forbes, Turiel, Shirley, Nundawar or Hardwick's range, Mount Riddell, Albuera, Drummond range, Frazer, Lindsay, Purren Virden, Bullinbulla, and Gulligal. The principal *rivers* are the Peel, Cockburr, Bireboola, Mooriloo, Bowen, Yorke, Turra-beile, Parry, Nammoy, Goonore, Gaora, Coradilla, Mulnerindie, Maules, Coagi, Buddle, Horton, Kareen, Bombelli, Gwydir, and Darling. The *creeks* are those of Carringoha, Purreonville, Weeves, Ogunbill, Moonbi, Calingorady, Moowar creeks; and the Lobster, Meadow, Welcome, Rocket, Bombelli, Limejuice, Pelican, and Roderigo ponds.

The Australian Agricultural Company hold within the boundaries of this district 562,898 acres out of their grant of 1,000,000 acres, the remainder, consisting of 437,109 acres, are, as previously stated, in Gloucester county.

The Peel river portion of the Australian Agricultural Company's lands, consisting of 313,298 acres, commences at the source of the Peel river, immediately under the great range, and is bounded on the east and north by that river, and on the west and south by marked lines to include the above area. These lands, from their elevation above the sea, and being beyond the genial effects of the sea breeze, are subjected to greater extremes of both cold and heat than the Port Stephen's grant, and are occasionally liable to frosts, but the soils in the valleys are rich and fertile in the extreme, and although crops of maize and tobacco cannot be depended upon, wheat and potatoes may, it is considered, be grown to any extent.

The hills are everywhere richly covered with a tall luxuriant grass, but comparatively bare of timber, not affording in this respect the same facilities as the land at Port Stephens. The Peel river forms, for some miles, the northern and eastern boundary of this portion of the company's possession, and streams of minor importance run through other parts of them. [See Supplement.]

The remaining grant of the Company, a

parallelogram of 249,600 acres, is not more than fifteen miles from the western boundary of the Peel's river grant, and embraces the greater portion of the flats or levels which were originally a fresh-water lake, since filled in by the washings from the surrounding hills, and consequently containing the richest alluvial soils of very considerable depth; the pasturage on the plains is decidedly herbaceous, on which stock of every description thrive remarkably well: the hills are coated with the same character of grass as that on the hills of the Peel's River tract, differing only from the grass on the eastern side of the Barrier range, inasmuch as it is more rank in growth, and more fattening in quality. The numerous streams that intersect and are comprised within the boundary lines of this portion, on reaching the plains become absorbed in the soils, so that they are somewhat deficient in surface water, which is nevertheless always attainable with ease and certainty at five-and-twenty feet below the surface; and Artesian wells might be here introduced with incalculable advantage.

On all the lands of the company large sums of money have been expended by the company in making roads and bridges, and in the erection of houses and buildings.

The company has also large flocks of sheep—herds of cattle and horses, depasturing on their several locations, the breeds of which are of the purest and most valued kinds, sent originally from this country, France, and Germany, at very great expense, and selected with considerable care and judgment. [Recent proceedings in Suppt.]

M'Leay squatting district is divided by the Macquarie river on the south from Macquarie county; on the west it is bounded by New England district; on the north by Clarence River district; on the east by the ocean. There is a large extent of available land along the banks of the M'Leay river, on whose banks, as before stated, Kempsey, the post-town, is situated. The soft slaty ranges, more than usually disintegrated and decomposed, are very general in the basin of the M'Leay river, and being converted into a rich loose soil, have a comparatively better grassy covering than the other formations; they are not, in general, thickly wooded, and, it is supposed, would be pre-eminently favourable for the growth of the vine, which seems to delight in earth mixed with, or formed from decomposed black clay slate, as is observable on the mountains near

the Rhine, and at Constantia, Cape of Good Hope. At Dongai creek, near the M'Leay river, there are several limestone caves full of stalactites, of singular conformation. Proceeding from Dongai creek, up the banks of the M'Leay river, there are a great number of squatting stations belonging mostly to retired officers. The country they occupy is abundantly watered, independently of the river, by numerous permanent chains of ponds and water-courses. The grass is good, but the country, especially on the north bank, soon becomes elevated, the ranges rising one beyond the other, in endless succession, covered with dense brushy forest, and intersected by ravines and water-gullies. There are scattered sheep stations on the Upper M'Leay and Apsley river; but the rugged mountainous country intervening between them and the Lower M'Leay, prevents all communication between the settlers on either side. Mr. Ralfe, the government surveyor, has discovered a passage over the mountains (some of which are 6,000 feet above the sea) from the table-land of New England, and a road has now been constructed to Port Macquarie, for wool-drays, so that the staple produce is conveyed in the weekly steamers to Sydney. The Solitary Islands are off the sea-coast.

Rivers.—M'Leay, Nambucca, and Bel-
lengen.

New England squatting district, bounded on the east by a line from the confluence of the Barnard and Manning rivers to the top of Mount Seaview, thence by a line to the top of Wirrikimbie mountain, and thence by a line north by compass from Wirrikimbie, dividing the district from Macquarie county, and from the M'Leay and Clarence River districts; on the north, by a line due west, so as to intersect the top of Mount Girard, near the head of the north branch of the Clarence river, and dividing this from the Darling Downs district; on the west by the western extremity of the great dividing range, so as to include the table land; and on the south by the Manning river, which forms the north boundary of Gloucester county. This elevated district is one of the best sheep pastures in Australia. Mr. Pattison remarks, in his work on New South Wales, that nothing will astonish the traveller in the bush more than the rapidity with which villages and settlements spring into existence; a court-house, inn, and store, are the first attempts in a bush township. In the centre of this squatting district is Arma-

dale, which, in 1842, had solely a police-station; in 1848-9, it had two places of worship, five inns, a steam-mill, stores, tradesmen of all kinds, and was a thriving town, with a weekly post to Sydney.

Eminences.—Ben Lomond, Mitchell, Gallical, Bullimulla, Basaltic rock, Wirrikimbie, Mount Seaview, Sugarloaf or Chandler's peak, and the Blue mountains.

Rivers.—Barnard, Apsley, Hastings, McLeay, Croker, Clarence, Severn, Burrell, Anderson, Dumaresque, Boyd, Mitchell, Man's, and various creeks and ponds.

Clarence River squatting district is bounded on the south by the ranges which form the basin of the Clarence river, on the south side of that river; on the west by the New England district; on the north by the ranges forming the basin of the Brisbane, and the Logan on the south side of these rivers; and on the east by the sea-coast. I do not know the area of this district, which is mountainous. The principal *eminences* are, Mounts Lindsay (5,700 feet), Warning (3,300 feet), Hughes, Wohman, Coke, King William, Ballow, and Barney. It is watered by the Boyd, Clarence, Tweed, Richmond, Brunswick, Logan, Teviot, and Albert *rivers*; and by Urara, Myrtle, Loadstone, Deep, Reynolds, and Yarril *creeks*.

The following is an extract from a report of Mr. Commissioner Fry, commissioner of crown lands in the Clarence district, and a magistrate of the territory, drawn up in June, 1846:—

"The plains on the banks of the Clarence river are of various sizes, many of them extending along the river for miles, the soil being a deep dark alluvial deposit on a substratum of clay, covered at top by a layer of vegetable decomposition, the accumulation of ages, and so thinly timbered that isolated acres may be found unincumbered by a single tree. The astonishing vegetation with which they are clothed is almost inconceivable, such indeed as I have never witnessed elsewhere save on the equally favoured regions of the Richmond, a river forty miles to the northward of the Clarence. It is impossible to imagine a country more worthy of having bestowed upon it the labour of the husbandman, or one more likely to remunerate him for his toil than the localities to which I refer, as they are remarkable, not alone for the excellence of the land, but for being placed under a climate than which none can be more conducive to the process of vegetation. An almost complete realization of Fenelon's conception with reference to Calypso's isle is exhibited in the climate of the Clarence, as, without any degree of hyperbole, a perpetual spring may be said to prevail during the entire year, for so mild are the seasons that vegetation remains unchecked even in the midst of the so-called winter. Rain is abundant, so much so as to give rise to the opinion that the district is unsuited for pastoral purposes, at least so far as sheep are

concerned. Frost is very unfrequent, and never intense, as may be inferred from its geographical position. The heat in summer is considerable, but an excess of two or three days is almost invariably succeeded by thunder showers which for a time render cool and invigorating the air, occasionally causing an extraordinary rapid change of temperature, the thermometer having been frequently known to vary no less than forty degrees in the space of twelve hours. This sudden caprice of temperature is however not in the least creative of unhealthiness; on the contrary, I am satisfied there is no part of New South Wales, however justly it may be famed for the salubrity of its climate, which is more conducive to the health of the human body than the district of the Clarence river; indeed most others must be confessed to yield to it in this respect, inasmuch as the never-fading mantle of green in which it is perpetually clothed, shields its inhabitants from the ophthalmic diseases so prevalent in other parts of the colony. Were it necessary to adduce any corroboration of this truth, I need only refer to the unsuccessful effort of a medical practitioner to establish himself in the district, who, though eminent both for professional talent and amenity of manner, was obliged to abandon the undertaking, after a fruitless attempt protracted for upwards of two years, his failure solely arising from the almost entire absence of disease, as it cannot be imagined that a population amounting to nearly 1,000 souls, and possessed of 150,000 sheep and 30,000 cattle, would be unable sufficiently to remunerate him were his services required. On the whole, a four years' residence in the district has confirmed me in the opinion, that no country ever came from the hands of its Creator more eminently qualified to be the abode of a thriving and numerous population, than the one of which I have been speaking; and in forming this estimate I have been uninfluenced either by prejudice or by interest, being no way concerned with it save in that arising from my official capacity."

From the thirtieth degree of latitude, there are tidal rivers along the coast to the northward, every forty miles; all perennial streams.

Canning Downs, to the westward of Churchill and Buller counties, are several miles in length, and two to three miles in breadth; on each side of the plains there are ranges of middling height—now a chain of cones, now flat-topped mountains, covered with brush, then long-backed hills sharply cut at their ends. The soil of the downs is black, and yet mild, with many white concretions of carbonate of lime; the vegetation is quite different from that of the forest ground on the other side of the coast range, and the grasses are more various, but they do not here exclusively occupy the ground; they grow, says Leichardt, more sociably in small communities together, separated by succulent herbs, particularly composites; the creeks are deeply cut, with steep banks covered with reeds. This celebrated explorer of the resources of New South Wales, says: that the finest mountain country he has seen in the colony, is the eastern side of

the "gap," through which the road passes from the Brisbane to the southern parts of Canning downs. Sunny ranges covered with fine grass and open forest, ascend pretty rapidly to the pass. The coast range forms an amphitheatre of dark, steep mountains; a waterfall rushes over a precipice 300 feet high, into a rocky valley, which one might take for the crater of an extinct volcano, if the surrounding rocks warranted such a supposition. Bold isolated mountains appear in the distance, in their various tints of blue, during sunset "dimming through a purple mist." Both sides of the mountain have some brushes, particularly the western slope, in which many of the trees of the Bunya brushes reappear. This is the most western point in which that beautiful palm, the *aracauria Cunninghamia*, has been found; the *Seaforthia* palm is frequent and high. The rosewood acacia is abundant; it has a very agreeable violet scent. The "bottle tree," which is found in various parts of tropical Australia, is seen here; it swells slightly four to five feet high, then tapers rapidly to a small diameter, the whole height about forty feet; foliage thin, crown scanty, leaves lanceolate, and of a greyish green. The Canning and Peel downs, which by some are considered as part of the Darling downs, extend northward to lat. $26^{\circ} 50'$, six miles beyond Jimba creek. Their length is estimated thirty to forty miles; they slope gradually from the great eastern range down to the Condamine.

Darling Downs are in length about 120 miles, from north to south, with an average breadth of fifty miles, bounded on the south by a line extending due west, so as to intersect the top of Mount Gerard, which is near the head of the north branch of the Clarence river, and marking this from the New England district, on the east by the range dividing the east and west waters, separating this from the Clarence River district and from Stanley county; on the north and west the boundaries are undefined. The plains of this extensive district are the Darling downs, Canning downs, Cecil, Peel, and Waterloo plains. The chief *eminences* are Mount Parker, M'Leay, and Herries' ranges, mounts Sturt, Mitchell, Logan, and Hay peak. It is well watered by the Condamine, Glen, Dumaresque, Boyne, Macintyre, Myall, and other streams.

The Darling downs were discovered by the late Allan Cunningham, in 1827, during the course of an expedition suggested by

then surveyor-general Oxley. Cunningham left the Upper Hunter's river on 30th April, 1827, with six servants and eleven horses, and previous to his departure, expressed to me his conviction, that the discovery of a valuable country would be the reward of his labours. He crossed the dividing range at an elevation of 3,080 feet above the sea, skirted the Liverpool plains at an elevation of 840 feet, through a forest country; and about forty miles to the northward of $31^{\circ} 2'$ S. lat., $150^{\circ} 30'$ E., found that the country had gradually risen to 1,900 feet. After crossing the parallel of 30° , and passing a poor region, the adventurous explorer descended to "a beautiful and well-watered valley, affording abundance of pasturage." This valley terminated sixteen miles farther north, on a stream (the Gwydir) flowing north-west, in $29^{\circ} 51'$ lat., 911 feet above the sea. Proceeding northward through a comparatively inferior tract, he came in lat. 29° , long. $150^{\circ} 40'$ on a river running westerly, eighty yards wide, and very deep, 840 feet above the sea, and 170 miles from the coast. Here the land was good. A country, then arid, on account of the existing drought, was next explored in a north-easterly direction for eighty miles, and eventually led to a clear, pastoral region, which has since proved so valuable. Deep ponds, nourished by the neighbouring streams immediately to the eastward, extend along its central lower flats, which being permanently watered furnish an almost inexhaustible range of cattle pasture at all seasons. From these central grounds rise downs of a rich, black, dry soil, and of a very ample surface; they furnish abundance of grass, are conveniently watered, and, being above the reach of the floods which take place on the flats during seasons of rain, are well adapted for sheep stations. Some hills are connected laterally with the bold outline of the stupendous-looking coast-line range; they are clothed from head to foot with dense underwood. The greater part of the downs is composed of hill and dale, woodland and plain, forming a most beautifully diversified landscape.

There is communication with the sea-coast from this table land by Cunningham's gap, through Stanley county, to Moreton bay. The mean elevation of the Darling downs is 1,800 to 2,000 feet above the sea; but Mount Mitchell, the highest peak of the adjacent range, is 4,100 feet above the sea. From the Condamine river the country rises very gently—almost imperceptibly, till the

road passes between two hills or ranges, where basaltic rock appears, and very extensive shallow valleys or plains, generally intersected by a creek overgrown with reeds and high grass. Here and there the grass tree is seen, either single or in groups and groves, one foot or more in diameter, and eight to ten feet high. The ranges which border the plains are covered with box-wood; with a gum-tree, called the Moreton Bay ash; and with other trees; but all very scattered. The forest becomes denser on approaching the eastern slopes. Dr. Leichardt thinks there is no equal to the Darling downs for sheep rearing, the mutton being fat and tender, and the wool excellent. One shepherd can here look after two to three thousand sheep; whereas, in other districts, three or four shepherds would be requisite for the care of a similar number. They are traversed, at moderate distances from each other, by streams or creeks, rising in the lofty coast range, and running westward to the Condamine river. The usual extent of a sheep run or station is twenty miles in length, by six miles in breadth, or three miles on each side of one of these creeks; one station, therefore, contains 120 square miles = 76,800 acres. Dr. Lang says, that on the east side of the range towards the coast, the sheep and cattle stations are not unfrequently of this extent. Large plains stretch along the Condamine river, some fifty miles long by twenty-five miles broad—true savannas, in the centre of which may be seen the sharp line of the horizon, as on the ocean. North-west of the Condamine, on the Cogoon river, are the valuable Fitzroy downs, with "mount Abundance;" and still further north there is an immense extent of pastoral country, discovered by Mitchell, which he states to be of greater extent than the whole of the present squatting districts; and that after his exploring party crossed the Darling river, they never suffered from heat, and had no want of water. There is excellent pasturage in the tracts watered by the Cogoon, Maranoa, Claude, Belyando, Warrego, Nogoia, and other rivers, which flow from the south side of the Plutonic cones—Pluto, Hutton, and Playfair; but the country on the Victoria river is better watered than any other part of Australia seen by Sir Thomas Mitchell. The soil is of rich clay, and covered with luxuriant pasturage. To the north-east, after passing the great plains of the Condamine, Leichardt entered on a

country which was alternately covered with fine open forest land, well grassed, and fit for cattle and horse breeding, and with long stretches of almost impassable brigalow scrub. Along the Dawson river or creek, in 26° S. lat., fine flats extend along its banks and open ridges, with sound ground some miles off the river. At Palm-tree creek, in 25° 34' S. lat., there are rich flats, fine ridges, and a plentiful supply of water. Following up this creek is a flat table land, where the waters are turned to the south-west. Proceeding towards Robinson's river or creek, the whole country is openly timbered, the ridges at the upper part of the creek, in part, covered with silvered-leaf iron bark, and well adapted for sheep. Fine flats extend along its bank, when first met with, in 25° 28' S. lat. At Zamia creek, in 24° 54' S. lat., there is a plain country of very great extent, almost unbounded by any rise towards the north-east. The creek is accompanied by small flats and thick scrub; but the flats extend more and more, and the scrub recedes as it approaches the large open country, which appears thinly timbered. The reader may follow, with his eye, these tracts of country, along the routes of Mitchell and Leichardt, in the accompanying map of New South Wales. A more detailed account of the new regions they explored is given at pp. 388 to 393.

The country north of Stanley county, not yet divided into counties, is marked by a very high range of sienite, broken through by basaltic rock, dividing Stanley county from the Wide Bay district. To the northward of the 27th parallel is the Bunya-Bunya country, so called from a gigantic tree of that name, with an umbrella-like head, which overtowers all the trees of the brush, and at certain seasons (about every three years) supplies the aborigines with a very palatable food, which they travel a distance of two or three hundred miles, periodically, to obtain. Some of these giants of vegetation, which rise to 150 feet, as straight as a gun barrel, have a circumference of twenty feet, at six feet elevation from the ground; the cones, which are about one foot long, and three-quarters in diameter, somewhat like a pine-apple, contain forty to fifty scales, beneath which a kernel is found, which Leichardt says, is "delicious eating," and that it is difficult to cease eating them. These trees, which look like "pillars of the blue vault of heaven," extend over a brush about fifty miles in length, by ten in breadth.

The "Glasshouses," in this neighbourhood, so named by captain Cook, rise out of low ranges—some like needles, others like castles—the highest (Biroa or Birwah) is about 1,000 feet high, composed of rock entirely different from the surrounding mountains. Dr. Leichardt, who had seen similar mountain features in the neighbourhood of *Clermont-Ferrand*, in Auvergne, considers these isolated cones to consist of what geologists call rockdomite. The Biroa is extremely steep, and its sides almost naked rock; but wherever a hollow or depression has allowed the accumulation of some soil and of moisture, a rich vegetation appears, single but full high bushes of a broad-leaved boronia, a dendrobium with red blossoms, and other flowers. Leichardt thinks that the sea once heaved against these mountains, which are surrounded by sandstone ridges of a coarse grain. The grass-tree (*Xanthorrhacæ*) grows in thousands (except on Darling downs, or other places possessing a very rich, black, mild soil containing much carbonate of lime, and is generally a sign of a poor or thin soil); casuarina, the apple, and other trees, abound in the district. The Boyne river, which traverses the region east of Wide bay, was discovered by Mr. Henry Stuart Russell. He found, after leaving Jimba creek (see map of New South Wales), that the whole character of the country alters—instead of the wide-spreading plains upon the Darling downs, there is a fine undulating country thickly timbered, and covered with the most luxuriant grass; the ridges are chiefly granite. The bed of the Boyne river is 1,500 feet above the sea. On the first day's journey down the river, the explorers passed over some lovely country; nothing could be more beautiful and luxuriant than the valleys; the foliage of all the trees, amongst which is the conspicuous wide-spreading "apple tree," appeared fresher and brighter than any Mr. Russell had seen in any other part of Australia. Droughts, they found, were unknown; the soil, dark and rich; the grass, chiefly oaten, which is the most fattening; the ridges high (always the sign of good sheep-ground,) and well wooded, chiefly with the broad-leaved iron bark. On the second day's journey down the Boyne, many streams joined it from the east and west; the land became more mountainous, and the valleys richer and more fertile. The third day the travellers stopped at Barendowan, "a beautiful spot," fifty miles in a direct

north line from Jimba. On the fourth day they came upon a full flowing stream from the eastward, which they called the Stuart. The journey was continued during sixteen days, for 300 miles along the banks of the Boyne—though the distance from Jimba was not supposed to be more than 150 miles. Where Mr. Russell's journey terminated, the climate was too warm for the growth of wool; but the country was well adapted for the cultivation of rice, sugar, and other tropical products. On the upper part of the river Mr. Russell says: "there is an expanse of the finest country for sheep and cattle, and also for the cultivation of European productions."

Irrespective of the arrangement of counties and districts, the colony is divided into three dioceses, viz., Sydney, Newcastle, and Melbourne; the latter includes the whole of the Victoria or Port Phillip district; Newcastle comprises the seven northern counties of New South Wales, viz., Northumberland, Gloucester, Hunter, Durham, Brisbane, Bligh, and Phillip counties; the Sydney diocese comprises all the remainder of the territory not included in either of the two before-mentioned dioceses. The Episcopalian churches and chapels in New South Wales, scattered throughout the colony, are in number—of stone, 28; of brick, 30; of wood, 12. The Roman catholic chapels—of stone, 28; of brick, 10; of wood, 6. The Presbyterians are divided into the presbytery of Campbelltown (three chapels), of Maitland (five chapels), of Melbourne (five chapels), of Sydney (five chapels and two temporary), and of Windsor (three chapels). The Wesleyan methodists have forty-two chapels in the different counties of New South Wales. [See Supplement for Missions.]

I have endeavoured to delineate the leading features of this noble colony, according to its several divisions; but as may naturally be supposed, a region that extends for more than one thousand miles along the shores of the Pacific, viz., from Cape Howe to Hervey's bay, and upwards of five hundred miles inland, *i.e.* from the ocean to the river Darling, and whose colonization is, comparatively speaking, the work of yesterday, can yet be but partially known. If we view New South Wales as a region ten times the size of England, with a climate unsurpassed for salubrity, and peculiarly adapted for the Anglo-Saxon race, with a table-land of

148 AREA, POPULATION, CULTIVATION, AND STOCK OF EACH COUNTY

nearly half-a-million square miles, supported for a thousand miles by gigantic mountain buttresses of four to six thousand feet high: this table land for the most part throughout the whole year covered with the most nutritious herbage, admirably adapted for the food of sheep and cattle, and intersected by a network of streams; the mountains clothed with useful timber, the valleys, where cultivated, yielding fifty to one hundred-fold of grain, the coast line indented with secure havens, and the ocean, the lakes, and the rivers teeming with fish—some idea may be formed of the importance of this valuable section of the British empire.

The limited extent of which we have as yet availed ourselves of the blessings thus

vouchsafed to England, will be best manifested by shewing, in a tabular form, the area of each county and district, the small number of acres cultivated, the quantity of live stock, and the number of acres to each individual in each county and district. It will be observed from the annexed table, that in the counties there are from five hundred to *five thousand acres to each inhabitant*; in the districts not yet formed into counties, the range is from *five thousand to ten thousand acres for each European resident*. The total number of inhabitants on about 96,909,364 acres, is 154,515, which gives for the portion of New South Wales included in these details, 628 acres for each Anglo-Saxon. [See Appendix A in Supplement.]

Counties and Districts in New South Wales, exclusive of Port Phillip.	English acres, in each about	White Population in 1846.	No. of acres to each inhabitant, about	Acres cultivated, 1848.	Houses in each, 1846.	Number of Live Stock in 1848.			
						Horses.	Horned Cattle.	Sheep.	Swine
COUNTIES:—									
Argyle	1,248,600	5,000	250	4,927	583	3,652	22,831	260,708	1,285
Auckland	1,536,000	1,000	1,400	—	100	—	—	—	—
Bathurst	1,190,400	4,391	297	4,656	670	3,614	18,339	266,369	1,021
Bligh	1,070,120	598	2,140	403	65	1,015	6,551	119,352	63
Brisbane	1,150,160	1,406	820	732	183	1,795	10,153	132,319	949
Camden	1,140,320	8,323	142	12,071	—	5,490	33,953	38,657	6,156
Cook	1,065,600	3,598	355	7,508	—	2,112	8,929	13,104	4,283
Cumberland	914,800	73,538	12	34,311	—	13,294	29,710	11,265	13,728
Durham	1,354,880	7,554	193	18,437	1,273	7,014	36,977	122,588	8,085
Georgiana	1,231,360	953	1,367	2,086	101	2,928	24,517	198,325	936
Gloucester	1,375,200	2,399	687	4,031	—	1,180	21,176	3,593	2,662
Hunter	1,315,840	1,190	1,200	2,555	222	1,416	6,776	11,239	1,735
King	1,159,840	1,665	724	1,598	247	1,319	16,200	106,986	708
Macquarie	1,408,000	1,973	740	1,200	316	872	14,544	14,300	698
Murray	1,458,080	2,721	730	3,632	351	4,340	28,288	328,972	1,339
Northumberland	1,498,880	13,335	115	15,816	2,802	5,827	34,653	21,806	10,653
Phillip	1,035,520	641	1,550	722	39	1,033	6,030	89,800	163
Roxburgh	972,160	2,353	486	2,570	349	2,420	18,250	188,900	630
St. Vincent	1,704,884	2,102	852	3,689	367	2,329	20,724	62,504	3,118
Stanley	2,000,000	1,599	1,333	42	257	446	3,947	23,829	145
Wellington	1,059,840	970	1,177	693	—	681	11,548	77,693	258
Westmoreland	1,018,880	1,575	179	1,787	—	2,040	13,277	46,994	924
COMMISSIONERS' DISTRICTS:—									
Bligh	5,000,000	788	7,143	305	70	1,313	52,940	193,221	—
Clarence River	3,000,000	1,225	2,500	331	72	1,405	48,847	116,767	867
Darling Downs	8,000,000	658	11,666	180	45	1,200	40,600	553,000	60
Lachlan	10,000,000	2,198	5,000	2,046	209	4,386	130,594	355,600	791
Liverpool Plains	10,000,000	2,110	5,000	—	233	3,946	130,081	341,465	—
McLeay River	2,000,000	466	5,000	440	52	884	17,128	250	706
Maneroo	2,000,000	1,916	1,052	1,969	185	5,446	106,530	353,252	603
Moreton Bay	2,000,000	268	10,000	58	14	1,127	19,412	290,962	145
Murrumbidgee	12,000,000	2,592	6,000	2,950	243	4,586	132,301	704,165	1,200
New England	5,000,000	2,231	2,500	1,400	114	3,582	79,820	822,603	1,000
Wellington	10,000,000	1,199	9,090	194	92	1,683	69,385	277,025	232
OTHER DISTRICTS:—									
Gwydir	—	—	—	—	—	2,060	118,097	109,347	50
Lower Darling	—	—	—	—	—	480	21,062	39,621	25
Wide Bay	—	—	—	—	—	51	36	20,787	—
Burnett	—	—	—	—	—	372	6,409	204,734	—
Maranoa	—	—	—	—	—	62	5,639	8,500	—
Total	96,909,364	154,515	—	133,369	9,254	97,400	1,366,164	6,530,542	65,216

Note.—Where a dash (—) is inserted there are no returns.

By some it has been supposed that the labour market of New South Wales was overstocked, by the immigration of the last ten years; but the foregoing exposition of the state of each county indicates the reverse. According to an able and interesting report from the emigration agent for New South Wales (F. L. S. Merewether, Esq.), dated Sydney, 31st May, 1849, it appears that the total number of assisted and unassisted immigrants into the Sydney and Port Phillip districts of New South Wales, during each of the ten years between the

1st of January, 1838, and 31st of December, 1848, was only 75,252, about *one third* of the number who proceed in one year from the United Kingdom to the United States. Of the 75,252 immigrants into New South Wales during those ten years, 60,614 persons were assisted by the income derived from the sales of crown lands in the colony, to the amount of nearly one million sterling (£975,433), or at the rate of upwards of £16 per head. The details of this remarkable fact are thus given in the official returns laid before parliament 31st January, 1850:—

Year.	Assisted Immigrants.							Unassisted Immigrants.					Gross Total of Immigrants.	
	Number landed.				Total.	Cost of Conveyance.			Number Landed.					
	Sydney District.		Port Phillip District.			Passage paid out of Colonial Funds.	Gratuities to Various Officers.	Total.	Sydney District.		Port Phillip District.			Total.
	Above 14.	Under 14.	Above 14.	Under 14.					Above 14.	Under 14.	Above 14.	Under 14.		
1838	3,601	2,501	—	—	6,102	£124,512	£6,756	£131,269	1,202	126	—	—	1,328	7,430
1839	5,675	2,177	479	85	8,416	133,847	10,541	144,388	1,632	351	95	55	2,133	10,549
1840	4,066	1,150	1,298	123	6,637	100,641	6,217	106,858	1,143	163	413	130	1,849	8,488
1841	9,297	2,891	6,153	1,762	20,103	313,490	17,477	330,968	1,454	286	449	191	2,380	22,483
1842	3,818	1,253	1,304	448	6,823	97,568	5,612	103,180	1,165	369	490	140	2,164	8,987
1843	—	—	7	4	11	18	—	18	822	145	115	49	1,131	1,142
1844	1,790	936	909	504	4,139	60,821	2,986	63,808	417	68	50	13	548	4,687
1845	351	146	1	—	498	6,897	562	7,459	333	128	78	59	698	1,096
1846	—	—	—	—	—	—	—	—	327	75	67	3	472	472
1847	—	—	—	—	—	—	—	—	412	103	230	71	816	816
1848	3,127	1,249	2,533	976	7,885	81,248	6,232	87,480	547	104	494	74	1,219	9,104
Total.	31,725	12,303	12,684	3,902	60,614	£919,047	£56,386	£975,433	9,454	1,918	2,481	785	14,638	75,252

Note.—It is remarkable, all circumstances considered, with how few mishances this migration across 15,000 miles of ocean has been carried on. One highly respectable shipping firm of London, Messrs. Marshall and Eddridge, have despatched to Australia in the eighteen months ending December, 1849, forty-three ships of 23,605 tons, containing 7,181 statute adults, without, I believe, a misfortune happening to any ship. The voyages have averaged 107 days to Sydney and the deaths have been only about 1½ per cent, which shows a degree of care highly commendable in the agents. According to the official returns, it appears that the number of assisted emigrants who embarked from the United Kingdom for New South Wales, was 7,855, and that the number landed in the colony was 7,885, the increase by births having exceeded by 30 the decrease caused by deaths. Thirty-two vessels were employed in the service, and the average contract rate paid by the government for each statute adult, was about £12 11s. The passage money amounted altogether to £83,094, of which sum £1,846 was contributed by immigrants themselves, leaving £81,248 to be charged on the colonial immigration fund. Of the total 7,835 immigrants, 4,624 were from England, 1,453 from Scotland, and 1,778 from Ireland. The proportion of males was 3,925, and of females 3,960. The number of these who could neither read nor write was 1,811, of whom 851 were under the age of four years. With regard to the religious persuasions, the totals were—Church of England, 3,801; Church of Scotland, 1,296; Wesleyans, 750; other Protestants, 711; Roman Catholics, 1,317; and Jews, 10. [The immigration caused by the gold discoveries is shewn in the Supplement.]

This important subject of emigration, however, must be reserved for a distinct portion of this work. I shall therefore merely observe, that the cry still, in New South Wales, is for more labour; so far from the labour market being overstocked by the introduction of 75,000 persons in ten years, the demand in the several counties and squatting districts is extraordinary. In May, 1849, on the Liverpool plains, and in New England and other districts, instant employment was given, at the following rates of wages, with provisions and lodging:—To shepherds, £15 to £28; hut-keepers, £18 to £22; farm labourers, £17 to £30; bullock drivers, £30; bricklayers, masons, car-

penters, and wheelwrights, £35 to £50; and overseers, £40 to £60 per annum; women servants, £15 to £25 a year; and these rates with wheat at 4s. to 5s. per bushel, and meat at 2d. per lb.

The colonial government has established depôts for immigrants at Paramatta, Bathurst, Goulbourn, Maitland, and Moreton Bay; to any of which places immigrants may be conveyed at the public expense immediately on their arrival. At all the depôts the immigrants are provided with food and lodging until they receive such offers of employment as may be considered fair by the officers appointed to the superintendence of the depôts. I cannot, therefore, better

150 PRODUCTS OF DIFFERENT DISTRICTS OF NEW SOUTH WALES.

conclude this description of the several localities in New South Wales, than by giving the following table, showing the principal productions of each district, and the demand for labour in them. This statement is compiled from returns furnished by the benches of magistrates in the different parts of the colony, for the first quarter of the year 1849; and, although somewhat voluminous, it is too important to intending emigrants, and too illustrative of the condition of the various divisions of the territory, to be omitted, or even curtailed:—

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
Sydney	—	The chief productions are vegetables and fruits.	The supply of mechanics and tradesmen is now kept up by the Colonial youths (sharp intelligent lads), who, after having completed their various periods of apprenticeship, enter the labour market, and are said to be clever and expert workmen. Farm labourers and female domestic servants are in request.
WESTERN.			
Paramatta	15	Hay, wheat, green barley, and maize, grapes, oranges, lemons, and vegetables.	There is a great demand for all sorts of country labour.
Windsor	34	Wheat, maize, potatoes, and hay.	All descriptions of country labour are in request, and a sufficient supply cannot be obtained.
Penrith	33	Wheat, barley, oats, maize, potatoes, tobacco, hay; grapes for making wine are grown to a considerable extent.	Female domestic servants and general labourers may readily obtain employment, at a fair rate of wages. Since the harvest commenced there has been a great scarcity of labour felt in this district, and farm labourers can readily obtain employment, at good wages, during the present season.
Hartley	78	Wheat, potatoes, and oats	There is no particular scarcity of labour in the district, but shepherds and farm labourers are still in demand.
Bathurst	113	Wheat and barley <i>(Now Gold in abundance.)</i>	There is still the same demand for servants of the following descriptions, viz.:—Shepherds, hutkeepers, farm labourers, cooks, housemaids, and general house servants. Single men and women, or married couples without children, would obtain employment readily.
Carcoar	144	Wheat, barley, oats, potatoes, hay.	Farm labourers, shepherds, hutkeepers, and domestic servants, particularly female servants, are in request. They are not to be hired at any wages.
Frederick's Valley	152	Wheat, hay, corn, and potatoes. There has been an abundant crop of wheat and hay, but the potato and the corn crops will be a failure, in consequence of the drought.	Shepherds and hutkeepers are in request.
Molong	163	Wheat, corn, hay, wool, meat, and mineral productions.	An additional supply of labourers of the following descriptions is still wanting: Shepherds, watchmen stockmen, miners, and house servants, male and female.
Binalong	205	Wheat, oats, barley, maize, potatoes, hay.	Shepherds, watchmen for sheep, agricultural labourers, blacksmiths, and house servants are in demand.
Wellington	230	Wheat, maize, and hay	Shepherds, hutkeepers, house servants, and general farm servants are in request.
Dubbo	270	There is little or no agriculture.	The demand for labourers of the following descriptions is still urgent,—carpenters, stonemasons, stockmen, hutkeepers, shepherds, sawyers, fencers, and farm labourers.
Mudgee	150	Wheat, maize, &c.	Shepherds, hutkeepers, and house servants are in demand.
SOUTHERN.			
Liverpool	20	Wheat, hay, and maize	Female house servants are in great demand. They are not procurable in the district.
Campbelltown	33	Hay, wheat, corn, and butter	Farm and domestic servants, male and female, are in urgent demand.
Camden	39	Wheat, maize, hay, and dairy produce. The culture of the vine is also considerable, and increasing yearly. A good many horses are bred, and some sheep.	This district is amply supplied with mechanics, but there is a scarcity of the other kinds of labour. Wages are decidedly on the rise. From the abundance of fertile land, and the proximity to the Sydney market, this district affords an opening for the comfortable settlement of a dense population. During the last five years the number of inhabitants has doubled itself. There are also ample means for public worship, religious instruction, and education.
Picton	49	Wheat, maize, rye, oats, barley, hay, butter, &c.	All descriptions of country labourers are in request, chiefly general farm servants, such as ploughmen, labourers, gardeners, milkmen, mowers, and thatchers.

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
WESTERN.			
Wollongong	64	Wheat, maize, oats, barley, potatoes, hay, and butter.	Steady, sober, and honest agricultural labourers and milkmen are much wanted in this district; also, female servants. Agricultural labour only is in request.
Berrima	81	Wheat, oats, barley, potatoes, hay, and all descriptions of English grain.	Farm labourers and domestic servants are in request.
Kiama	88	Wheat, maize, potatoes, oats, barley, butter, cheese, honey, beef, and pork.	Farm and house servants, and milkmen are in request.
Bungonia	117	Wheat, barley, maize, oats, hay, potatoes, cheese, and butter.	Labourers of the following description are in request:—Carpenters, wheelwrights, and blacksmiths; shepherds, farm labourers, and house servants, especially females.
Marulan	108	Wheat, barley, maize, oats, hay, potatoes, cheese, and butter.	Carpenters, wheelwrights, stonecutters, watchmen, and cooks, shepherds, labourers, house servants, especially females, are in request.
Goulbourn	126	Wheat, maize, barley, oats, and potatoes.	Shepherds, farm and domestic servants, both male and female, are in request.
Braidwood	164	All kinds of grain	All kinds of country labour are in request.
Shoalhaven	103	Wheat; maize, potatoes, and dairy produce.	Labourers are very scarce and wages high in consequence. Agricultural labourers and dairymen are most in request.
Broulee	209	Wheat and potatoes, principally with maize, barley, and oats.	Farm labourers and female servants of all work are in request. It is impossible to procure female servants, in particular general house servants. There are no farm labourers to be got. In harvest, or any other hurried time, the small settlers are obliged to assist each other.
Cooma	251	Wheat, barley, potatoes, and oaten hay. There is a good supply of the above this season, with the exception of the potatoes.	Good house servants and shepherds are in demand, and would readily find employment in this district. The labour in request is chiefly that required for pastoral and agricultural purposes.
Eden	258	Wool and tallow; little or no grain of any description; potatoes and hay are the only articles of farm produce raised.	Shepherds, stockmen, and hutkeepers, are in request.
Queanbeyan	182	Wheat, barley, maize, potatoes, and hay.	Domestic servants of all descriptions are much required in this district.
Yass	179	Wheat, maize, oats, barley, hay, potatoes, fruits, and vegetables.	Labourers and servants of every description are in great request, and improvements are lying over for want of them.
Tumut	225	Wheat, oats, hay, maize, and potatoes.	The operations of the settlers are completely paralysed for want of labour. Children from eight years of age to sixteen are engaged at wages from £12 to £20 per annum. The labourers wanted are shepherds, hutkeepers, farm and house servants, laundresses, housemaids, and nursemaids.
Gundagai	244	Wheat, maize, potatoes, and hay.	Labour of every description is much wanted. Wages are very little, if any, lower than last quarter. The principal demand is for stockmen, shepherds, hutkeepers, watchmen, agricultural labourers, and domestics. A few mechanics would meet with constant employment.
Wagga Wagga	308	Wheat, oaten hay, maize, in limited quantity; potatoes to a limited extent; wool and tallow. The soil, however, is capable of producing, in luxuriance, every description of crop by the medium of ordinary industry. Fruits of all kinds thrive well; and the vine, which has been latterly introduced, promises to rank amongst our principal products.	The employers of labour in this district are all complaining of the very high rate of wages, and improvements of every kind are neglected in consequence. Were wages low and labour abundant, the settlers here could give employment to at least 500 fresh male labourers every year. There is now a demand in the district for carpenters, smiths, wheelwrights, sawyers, brickmakers, shepherds, agricultural labourers, and domestic servants, male and female.
Albury	379	Wheat, maize, barley, oats, grass, and oaten hay, potatoes, &c.	Shepherds, watchmen, agricultural labourers, and female domestic servants are in request.
Moulamein	490	Sheep, cattle, and wool. No agricultural productions.	There is an ample field for shepherds, hutkeepers, and others who will make themselves useful about sheep-stations. The most helpless will find employment if he has only the use of his limbs and legs. The present demand is for shepherds, hutkeepers, and bush carpenters.

152 WAGES FOR LABOUR, AND DEMAND FOR IT IN N. S. WALES.

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
NORTHERN. Brisbane Water	30	Maize, potatoes, onions ; also, oranges, grapes, and other fruit.	The demand for labour has been gradually increasing since the commencement of 1845, and many people would hire men if they could get them. The sum given to a labouring man does not, by any means, indicate the amount really paid by the employer for efficient service. There is abundant employment in the district for men who work by the job in the bush, chiefly on their own account, as sawyers and splitters, and who either sell their produce on the spot, or send it to Sydney; consequently, some of the best workmen are at work on their own account, and most of those employed on farms are in some way inefficient, which increases their wages virtually from 10 to 20 per cent. or more, by reason of the labour performed by them being below the average quantity or quality. The want of labour and high wages still operate in limiting the cultivation of land. We think that vineyards (for which the soil is, in many places, well adapted) would be extended if labour was not so high.
Macdonald River	66	Wheat, maize, barley, and potatoes.	There is a great demand for general agricultural labourers in this district.
Wollombi	93	Wheat, maize, potatoes, hay, grapes, &c.	Male and female farm and domestic servants are in great demand.
Newcastle	70	Maize, wheat, barley, oaten hay, and lucerne, potatoes, beef, pork, poultry, butter, cheese, salt, cloth, leather, fruit, and wine.	Agricultural labourers and female servants are in request.
Raymond Terrace	85	Wheat, maize, barley, oats, potatoes.	Shepherds, domestic servants, male and female.
Fort Stephens	91	Wheat, maize, potatoes, hay, tobacco, cheese, butter, bacon, hams, hides.	Farm labourers, bullock drivers, stockmen, wheelwrights, splitters, and fencers are in request.
Dungog	150	Wheat, maize, barley, millet, potatoes, tobacco, cheese, hay, fruit, and wine.	Agricultural labourers and house servants are in request.
Paterson	131	Wheat, maize, barley, oats, potatoes, hay, tobacco, fruits of all kinds.	A slight reduction has taken place since the arrival of immigrants, but the demand for useful labourers of the following descriptions is still urgent:—Males—labourers of all sorts, farm labourers, and shepherds. Females—house-servants of all work, cooks, and laundresses.
Maitland	110	Wheat, maize, hay, tobacco, and grapes.	Agricultural, pastoral, and domestic servants are in request.
Singleton	124	Wheat, maize, and hay	Domestic servants are much wanted; shepherds and labourers are also in request.
Muswellbrook	156	It is not, generally speaking, an agricultural district, there are several vineyards.	The difficulty in obtaining labour is very great, and the amount demanded, as wages, is ruinous to the proprietors. The immigration of the past year has not at all affected the price of labour in this district. Shepherds and farm servants are most in request.
Merton	170		
Scone	182		
Murrurundi	200	Wheat, maize, potatoes, and wool.	All kinds of country labour are in request.
Cassilis	335	Wool and hay	Shepherds and watchmen are principally in request.
Wee Waa	250	Wool and fat stock	Shepherds, hutkeepers, stockmen, and country mechanics are in request.
Tamworth	264	Wheat and maize	The demand for labour in the district is on the increase, and likely to continue so. The descriptions required are shepherds, stockmen, hutkeepers, farm labourers, and blacksmiths.
Warialda	280	Wheat and maize, but in quantities so very small as to be of no importance.	The recent immigration has not yet exercised any perceptible influence on the rate of wages in this district; the demand for labour still exceeds the supply to such an extent, as to occasion great loss and inconvenience to employers. Shepherds, bullock-drivers, house servants, and labourers of every description are in request.
Port Macquarie	278	Wheat, hay, maize, and potatoes.	Farm labourers, shepherds, and house servants are in request. Female servants are much wanted.
McLeay River	250	Maize, wheat, a few potatoes, and a small quantity of tobacco.	There is demand for labour in the district, to which the supply is not equal, and a number of labourers of the undermentioned descriptions would find immediate employment at remunerating rates—stockmen, farm labourers, and bullock-drivers; and a few single females as general house servants.

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
NORTHERN. Wellingrove	330	Wheat, potatoes, and corn	Although wages are about £3 to £4 less, it can only be effected by great risk in the increase of numbers of the flocks, occasional employment of blacks, and thus standing out against the exorbitant wages asked, waiting any opportunity to replace those who will not take any reduction. The most urgent demand is for shepherds.
Armidale	334	Wheat, barley, oats, maize, and potatoes	Shepherds, watchmen, labourers, and mechanics are in request.
Tenterfield	334	Wheat, maize, and potatoes, for local consumption; also, wool and tallow for exportation.	Shepherds are most wanted, but farm labourers and mechanics are also in request.
Tabulam	380	Maize and potatoes	Shepherds, hutkeepers, and stockmen are in request.
Grafton	280	Wool, tallow, maize	Great scarcity of shepherds, stockmen, farm labourers, bullock-drivers, and house servants. Good house servants are not to be obtained.
Canning Downs	390	Maize, potatoes, wool, tallow.	Many hundreds would find employment. Shepherds, watchmen, joiners, carpenters, smiths, agricultural labourers, and domestic servants of both sexes.
Warwick	406	Wool and tallow	Shepherds, watchmen, fencers, carpenters, blacksmiths, wheelwrights, agricultural labourers, and domestic servants, of both sexes, are in request. Many hundreds would find employment.
Drayton	409	Maize	The demand for labourers, shepherds, and domestic servants is great, and large numbers would find immediate employment.
Brisbane	450	The vegetable productions are chiefly maize, potatoes, and garden stuff, a very little oats for hay.	Stockmen and shepherds are in request.
Ipswich	470	Wool and tallow	Stockmen, shepherds, bullock-drivers, and hutkeepers are the descriptions of labourers in request.

GEOLOGY AND SOIL.—It would be unreasonable to expect connected details concerning the geological formation of a country so newly discovered, and still so imperfectly known; but the valuable labours of Count Strzelecki, Sir Thomas Mitchell, Messrs Berry, Jukes, and others, have furnished much interesting data, from which the following statements are derived:—The line of coast throughout the territory of New South Wales, presents in general an aspect of bold perpendicular cliffs of sandstone, lying in horizontal strata. These cliffs are occasionally interrupted by sandy beaches, behind which the country is low, or undulating, the high land retiring to a considerable distance. These spaces are supposed by Mr. Berry to have formed, at no very remote period, the entrances of bays and arms of the sea; indeed in many parts they are still occupied by sandy beaches, extensive salt water lagoons, being separated from the ocean only by a bank of sand, through which the impetuous waves even now occasionally force a passage; as at Reid's Mistake, at Lake Macquarie, near Newcastle, and at Lake Alexandrina, at Encounter bay. As a general remark, the country east of the Blue mountains, may be said to be of a sandstone formation, and that on the west granitic.

DIV. I.

Count Strzelecki, assuming it would appear, that Australia, or at least some portion of it, was elevated by volcanic power, supposes that the incandescent granitic matter was the first to appear, after the breach of the sub-marine crust; that it was on the granitic talus that quartz rock and sienite forced their way to the surface, and that upon the latter rocks serpentine, porphyry, and greenstone made their appearance. Thus about Bathurst, on the Blue mountain range, quartz rock overlaps granite, and on the Honeysuckle range, porphyry overlaps sienite; on Mount Kosciuszko (in the south-west), granite is seen forming a base 2,000 feet above the sea, upon which sienite and quartz rock attain a further elevation of 4,500 feet. There is a want of uniformity in the inclination of the uplifted stratified crust; at Mount Kosciuszko mica slate, and siliceous, and argillaceous slates, are *vertical*, and attain the height of 3,200 feet. At Mane's range, between the rivers Murray and Murrumbidgee, the upheaved strata are nearly horizontal. The stratified rocks occupy a small zone of New South Wales.

The count further observes that New South Wales exhibits few records of irruptive igneous rocks, and preserves all its crystalline siliceous rocks, in addition to the sili-

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cious sedimentary ones, which in the course of ages have accumulated upon its surface. He states that the stratified rocks from mica slate upwards, reach only to the variegated sandstone inclusively, which sandstone is incumbent on the coal deposits; and that the thickness of these stratified rocks, does not exceed 2,200 feet, of which sandstone constitutes 1,400 feet. The area of the *crystalline*, compared with that of the *sedimentary* rocks, is estimated as three to one; but in Van Diemen's Island as seven to one.

This accurate observer states that in New South Wales, the area of granite, protogene, hyalomictic, quartz rock, sienite, siliceous breccia, quartzose porphyry, siliceous slate, sandstone, and conglomerate, all containing above sixty per cent. of silica, is to the area of eurite, felspathic porphyry, greenstone, and basalt rocks, containing less than sixty per cent., as four to one; but in Van Diemen's Land, on the contrary, the area of the first division is to that of the second as one to three. Of the crystalline rocks, granite, sienite, and quartz, predominate; the greater part of the coast range of mountains, and the elevated terraces or steppes, westward of those mountains, are composed of granite, which is supposed to extend far into the interior of Australia, in masses of mammillary, tuberos, globular, or botryoidal forms. In the country to the north-east of Wellington Valley, these granitic masses present a striking resemblance to those graphically described by Baron Von Humboldt, in his account of the Altai regions. Sir Thomas Mitchell says that quartzose rock, exhibiting a tendency to break into irregular polygons, some of the faces being curved, is "most extensively distributed in the interior of New South Wales."

The sandstone strata extend from the sea coast to the river Nepean, on the west. Throughout this extent of country, the sandstone seems to spread like a level platform, and although the surface rises in hills and ridges, these seem to consist of a mass of clay, the surface of which has been worn into inequalities by the action of water. This circumstance, to some extent, accounts for the singular fact, that in New South Wales, the tops of the hills, which retain most of the original clay, are generally more fertile than the valleys, unless the latter contain alluvial deposits; and it is probably owing to a similar cause, that the valleys are cold and bleak, while the tops of the hills are warm and verdant. This clay is generally at the

surface red, and impregnated with iron; in some places, however, it is white and saponaceous, appearing under the form of pipe-clay, containing frequently calcareous stones resembling stalactites, evidently formed by aqueous deposition; at the depth of a few feet, it generally assumes the appearance of schistus, impregnated with sulphate of alumina, and sulphate of iron. In the ravines are found coal-field schistus, with vegetable impressions; and also argillaceous iron ore.

Westward, or beyond the Nepean river, the sandstone strata are forced upwards, and extend from north to south, forming the lofty ridge of the Blue mountains; towards the north these mountains are sterile and rugged; towards the south, however, the sandstone is in many places covered or displaced by whinstone, which sometimes assumes the form of common, at other times of porphyritic trap. In the latter form it is manifested through the well-watered and fertile county of Argyle.

On advancing further to the south and west, granite and limestone, both foliated and granular, are abundant, perforated in all directions with extensive subterranean caverns, exactly similar, both in character and stalactite decoration, to those found in regions of a similar formation in Europe and in America. But both are frequently met with in detached quantities in the northern and eastern parts of the colony; and a fine limestone formation occurs also to the north-westward of Sydney, at the head of William's river. In some parts of the territory (as in Argyle) the limestone passes into a beautiful close-grained marble, as white as that of Carrara; at Shoalhaven it is jet black, traversed by veins of white calcareous spar; between Wellington Valley and Boree there are innumerable varieties of finely-variegated marbles, all affording materials to numerous skilful artisans. Granular limestone is extensively developed on the Upper and Lower Hunter, between Wellington and Mount Canoblas; between Cullen-bullen and Wolerawang; on the Wollondilly, in Westmoreland, and on the Shoalhaven river. There are varieties of different minerals found in various places; Hunter's river flows for a considerable distance over rocks of jasper, beautiful agates, opal, and chalcedony; innumerable petrifications are, moreover, found on its banks.

Near the burning mountain of Wingen, amorphous specimens of cornelian, white,

pinkish, and blue, have been found; also angular fragments of ribbon and fortification agates, and balls of agate, some of them filled with crystals, varying from the size of a pea to that of a hen's egg; and others of a blueish-white and clouded colour, having spots of white dispersed throughout them. Several of the agates collected from Mount Wingen had their surfaces crested over with iron; some of those found at Mount Agate were crested with native copper, while others from the same locality presented a most beautiful auriferous appearance.

As it is desirable to throw every possible light on the geology of this interesting country, I give the following observations made by Mr. Allan Cunningham, concerning the strata seen to the north and east.

At the Wingen or burning mountain, the summit of the south-eastern side of the dividing range consists of greenstone slate, and the base of a quartzose conglomerate: the low hills, which form the eastern side of Liverpool plains, consist of a similar conglomerate: while the hills to the north of the plains are composed of a very finely-grained granite. Between the latitudes of 31° and 30° , the country gradually ascends from the level of the Liverpool plains, or 840 feet, to nearly 2,000 feet above the level of the sea, and presents a broken irregular surface, often traversed by low ridges of clay slate. To the north of 30° lat. the base of the ridges by which Stoddart's valley is bounded, consists of serpentine, their flanks and summit of hornstone, and the hills at the head of the valley, of clay slate. In the bed of Peel's river, which crosses the northern extremity of the valley, a thin horizontal bed of calcareous sandstone was noticed, between strata of indurated clay or shale. The country for fifty miles to the north of Peel's river exhibits a moderately undulating surface, covered in some parts with fragments of cellular trap; and the hills which bound the route on the westward, as far as the parallel of $29^{\circ} 10'$, consist of a reddish coarse-grained sandstone, in nearly horizontal strata. Beyond this point, towards the north-east, and a little to the north of 29° S. lat., the banks of Mogo creek were found to be composed of a coarse friable sandstone. Pursuing the same direction, the country for forty miles presented a rugged surface, and the prevailing rocks were sandstone and clay slate; but occasionally, the tops of the hills formed low terraces, composed of a quartzose conglomerate. In the bed of a creek in

$28^{\circ} 26'$ S. lat., and in the meridian of Paramatta (151° E. long.), a hard slaty rock was noticed; and the country beyond it was found to be composed, where it could be examined in the dry water-courses, of flinty slate. In $28^{\circ} 13'$ S. lat., a fertile district commences, extending for eighteen miles, or to the foot of the dividing range, in the parallel of 28° . At the base of these mountains, were procured specimens of basalt containing olivine: at the height of 1,877 feet above the level of the sea, the rock consisted of amygdaloid; and the extreme summit, 4,100 feet above Moreton bay, of a brick-red cellular trap, the cells having an elongated form and parallel position.

In 29° S. lat., a deep gorge is composed of clayslate, and traversed by a rapid stream, in the bed of which were noticed large boulders of the grey granite. During the next forty miles, the only rocks noticed were reddish granite, and fragments of basalt. In $29^{\circ} 26'$ S. lat., large masses of a fine quartzose conglomerate occurred, and they were afterwards found to be very generally scattered over the adjacent country. The boundary hills of Wilmot Valley are stated to be a fine-grained gray granite; and those which form the head of it, in $30^{\circ} 11'$ S. lat., of brownish porphyry, containing grains of quartz.

The geology of the country farther north, is equally striking. The western shores of Moreton bay, from the entrance of Pumicestone river, to Red Cliff point, are faced by a reef of considerable breadth, which at low water, is stated by Mr. Cunningham to exhibit a ledge of chalcedony. Pumice-stone has been found on different parts of the east coast of Australia.

In tracing the Brisbane river, which falls into Moreton bay, the first rock observed was talc slate or chlorite; and opposite the settlement, sixteen miles from the mouth of the river, is a quarry of pinkish claystone porphyry, used for building. In the ravines further up serpentine occurs, traversed by veins of asbestos and magnetic iron. Sixty miles from Moreton bay, ledges of hornstone crop out in the banks; and in the same part of the river, a considerable seam of coal appears in its channel. A portion of the stem of a fossil plant, presenting "concentric fibrous bands, and a longitudinal foliated structure at right angles to the bands," was found in the vicinity of the seam of coal. At "the Limestone station," on Bremer River, which falls into the Bris-

bane, were procured a series of specimens, which consisted of yellowish hornstone; indurated white marl, resembling some of the harder varieties of chalk, and containing immense masses of black flint; blueish-grey chalcedony passing into chert; and a gritty yellowish limestone. A bed of coal has likewise been noticed in the Bremer, and traced from it to the Brisbane. To the south of the limestone station is a remarkable hill, consisting of trap, called Mount Forbes; and fifty miles to the south of the penal settlement on the Brisbane, is the Birman range, from which were obtained specimens of compact quartz rock; and from Mount Lindsay, likewise south of the Brisbane, specimens of granite.

The strata in the cliffs, containing the Newcastle coal basin, are stated to be,—coal (the lowest of the deposit), three feet; greenish sandstone, fifty; coal, three; greenish sandstone with blue veins, twenty-five; coal, five; clay rock (greyish), and shale (blueish), with various impressions, forty-three; coal, five; cherts, gritstones, with angular fragments of flint intermixed with thin veins of coal, fourteen; coal three; conglomerate (the uppermost of the deposit), twenty-three; total 204 feet.

The osseous breccia found in the caves at Wellington Valley, have been adverted to in the general view of Australia, at pages 398–9. Their structure appears to indicate that New South Wales has passed through periods of terrestrial revolution precisely similar to those experienced in other parts of the world. The bones found in the caves attest the former existence of animals of whom we have no other record, and also of several similar in species to those now known, but of gigantic size. Immense beds of sea-shells are found at various elevations above the sea; in some places on the tops of hills, in others imbedded in sandstone. Close to the banks of Hunter's river, layers of shells have been found of unexplored depth, and have long been used by the inhabitants in the manufacture of lime. Some of the valleys, such as Dart Brook and Lake George, possess imperfectly fossilised fragments of trees. Elevated beaches in horizontal beds and at various heights are disposed at wide intervals along the coast. At Lake King (Gipp's Land) they are seventy feet above the sea, composed of an indurated reddish clay and calcareous paste, containing *ostrea* and *anomia*, and different from the existing species, which latter are found on

the elevated beaches between Cape Liptrass and Portland bay. Basalt and its varieties occur at Port Stephens, the Upper and Lower Hunter, and other places. The conclusions at which count Strzelecki arrived, after a series of examinations of the coast line of mountains in Eastern Australia, are—that the chain was upheaved during four distinct epochs, to a height varying from 1,000 to 6,500 feet above the sea level; that the upheaving force, arising from volcanic action, was exerted with different degrees of intensity, as shown by the varying heights of the peaks, but that it was uniform in direction, ranging from north-east to south-west; that the lithological character of this chain, and of the spurs which belong to it, is chiefly due to the presence of crystalline rocks, and that the irruption of granite, sienite, hyalomictite, and protogene, took place at the beginning of the first epoch; that of quartz and porphyries during the two first epochs; and that of basalt and its varieties during the last two; the irruption of greenstone continuing during the whole four. From this lithological character, and from the geological phenomena found grouped along its course, this mountain range may be considered as the Australian eastern axis of perturbation.

The *Crystalline* and *Unstratified Rocks*, mentioned by Strzelecki, as belonging to the first epoch, are granite proper, porphyritic granite, glandular granite, protogene, sienite, hyalomictite, quartz rock, serpentine, and eurite; the *stratified* or *sedimentary* rocks, are mica slate or schist, silicious slate and argillite. The descriptions by which these several rocks may be known, are stated by the distinguished geologist to whom I am so largely indebted in this section.

Granite Proper.—Composed of equal proportions of quartz, felspar, and mica; structure granular, dissemination of ingredients regular, colour reddish-grey. *Glandular granite*, oval-shaped masses of granular mica, tabular quartz, and tabular felspar, irregularly interspersed through a quartzose paste. *Porphyritic granite*, quartz, and mica, with large oblong and irregular crystals of felspar, confusedly imbedded in the masses. *Protogene*, a confused crystallization of tale, felspar, and quartz, marked by an unequal distribution of ingredients, and by the entire exclusion of mica. Colour greenish-white, sometimes inclining to red. *Hyalomictite*, a homogeneous, milky, or smoky-looking quartz rock, with an admixture of white

mica, to the entire exclusion of felspar. *Sienite*, a granular and massy structure, invariably composed of a vitreous and translucent quartz, and of hornblende, which is prismatic and of a dark blue green; at times intersected by veins of sulphuret of iron, by which the already beautiful appearance of the rock becomes yet more resplendent; the presence of sienite always indicates the proximity of granite. *Quartz*, in New South Wales, of a whitish or somewhat milky colour, sometimes found translucent and perfectly homogeneous. *Eurite*, composed entirely of felspar, laminated or grained; colour, a pale yellowish-red, inferior in hardness to quartz, adheres to the tongue, and exhales an argillaceous odour. *Serpentine*, colour sometimes emerald, sometimes leek-green, but never uniform throughout; externally it often shines with a resinous lustre, at the edges it is translucent; solid, semi-hard and brittle, fracture earthy, uneven, sometimes laminated, fragments irregular and splintery, feels unctuous; it is traversed by short, curved, and narrow veins of a white silky amianthus, the fibres of which are perpendicular to the direction of the vein.

Mica, or Slate Schist.—According to the varying proportions and the difference of colour of quartz and mica, which, combined, form mica slate, the shades are green, white, red, blue, brown, and yellow; structure laminated. *Siliceous slate*, usually grey, sometimes white, reddish, or yellowish, traversed by numerous veins of quartz, looks greasy, and is tough. *Argillite*, a greyish-black, with a bright silky lustre; substance opaque, with a smooth surface, structure foliated; adheres to the tongue, and yields a strong argillaceous odour: fragments tabular, thin, shining, and friable.

Mount P. P. King, whose summit is 2,646 feet above the sea (see page 393), is described by Mitchell as having at its base, and on its sides, in large masses, the very compact felspathic rock which characterises the valley of the Darling. This, he adds, has been considered a very fine-grained sandstone; but it is evidently an altered rock. Here, in contact with trap, it possessed the same tendency to break into irregular polygons, some of the faces of which were curved; one mass having been so tossed up, that its lower side lay uppermost, inclined at an angle of about 60°. That this is a hypogene rock, sometimes in contact with granite as well as with trap, is evident at Oxley's

Table Land, and other places. [Further geological explorations are given in Suppt.]

SOILS.—In N. S. Wales, as in other countries, the rock which forms the basis of the soil may be known from the trees or herbage growing thereon. Thus a dwarfish eucalypti, with glaucous-looking leaves, growing mostly in scrub, indicates a sandstone formation, while open grassy park-like tracts thinly interspersed with lofty eucalypti, characterise the secondary ranges of granite and porphyry. The limestone formation has on its superincumbent soil trees of lofty growth and large size. These marked features will account for the idea expressed by Captain Sturt, that the Australian trees seemed gregarious. In general the covering of sandstone is the common Australian clay, but over whinstone it is invariably a light black mould.

Of the productiveness of the Australian soils, there cannot be a doubt. Many farms have been annually cropped for twenty years without manuring; the eucalypti trees by shedding their bark, annually furnish an ample supply of alkalies to the soil, which has a degree of softness, coherence, and porosity, common to all virgin soils; a low specific gravity, and a proportion of organic to inorganic matter, amounting to a third, and in some instances to a half of the whole quantity. The numerous places where carbonic acid gas escapes through the fissures of the earth in New South Wales, cause many of the rivers, particularly near their source, to be impregnated with this acid, and they are also charged with mineral salts. In frequent instances the waters of the colony pass through calcareous rocks, and carry with them dissolved lime, they are therefore very valuable for irrigation, which may be most extensively and usefully practised in Australia. Any one who has visited Malta, and seen the rich crops produced on an apparent barren sandstone formation, by irrigation, will recognise the great benefit which New South Wales would derive from pursuing the same course.

Mr. J. Pattison, a resident of twelve years' experience in New South Wales, and the author of a recent brochure on its resources and capabilities, says the country is capable of sustaining many millions of people by its agricultural products; for "there is abundance of land of the richest description." Speaking of the qualities of the soil, he says:—"The produce, under a good sys-

tem of husbandry, is enormous, and would stagger the credibility of those who have not been eye-witnesses. The late Dr. Wilson, R.N., obtained, at his estate in the county of Murray, *eighty-five bushels of wheat per acre*; and at Narren Gallen, near Yass, on the estate of Cavan, I have seen 700 bushels reaped from a field of fourteen acres, or equal to *fifty bushels per acre*.”*

Count Strzelecki, after a minute and careful analysis of the soils of New South Wales and Van Diemen's Land, extending over forty soils in quality, furnishes the following as the *mean* of his investigations:—

Quality of Soils	Highest productive power.	Lowest productive power.
PHYSICAL CHARACTER:—		
Absorption of solar rays . . .	+13.4	+14.21
Emission of heat	—2.5	—6.1
Capacity for moisture	+8.0	+3.6
Specific gravity	1.8	2.04
CHEMICAL CHARACTER:—		
Soluble portions of 100 parts	30.23	8.53
Proximate constituents in 100 parts:		
Vegetable and animal matter	14.70	5.50
Water	7.88	3.71
Silica	54.32	69.99
Alumina	9.82	10.02
Peroxide of iron	3.18	4.48
Carbonate of lime	4.74	4.12
Sulphate of lime	2.33	0.08
Potash and soda	0.74	0.56
Chlorides	traces of	traces of
Magnesia	0.82	0.87
Metallic sulphurets and oxides	0.63	—
Loss	0.84	0.67

The inferences which the analyser draws from these facts are—

1. That both the fertile and the sterile soils absorb on an average nearly the same amount of solar heat; but the fertile soil emits, through terrestrial radiation, an amount of heat two-thirds less than that yielded by the sterile soil.

2. The fertile soil absorbs more than double the quantity of moisture absorbed by the sterile soil.

3. The solubility of both soils in hydrochloric acid is not equal; the fertile soil in 100 parts containing 30 parts of soluble, the sterile soil but eight.

4. The fertile soil possesses nearly three times as much of vegetable and animal matter as the sterile soil.

5. The mineral constituents of each kind

* *New South Wales; its past, present, and future Condition; with Notes upon its Resources and Capabilities.* London, published by Johnson and Hunter, 1849—p. 90.

of soil considered apart from the vegetable matter, the hygrometric water, and the loss in the analysis, and expressed in their atomic weight, are in the—

High productive Soils.

Mineral Constituents.	Parts.	Atomic weight.	Proportion in Nos.
Silica	70.93 =	0.122	30
Alumina	12.84 =	0.020	5
Peroxide of iron	4.15 =	0.004	1
Carbonate of lime	6.25 =	0.020	5
Sulphate of lime	3.04 =	0.007	1
Potash and Soda	0.95	—	—
Magnesia	1.00	—	—
Metallic oxides	0.87	—	—

Low productive Soils.

Mineral Constituents.	Parts.	Atomic weight.	Proportion in Nos.
Silica	77.70 =	0.132	26
Alumina	11.11 =	0.017	3
Peroxide of iron	4.94 =	0.005	1
Carbonate of lime	4.57 =	0.014	2
Sulphate of lime	0.08	—	—
Potash and soda	0.56	—	—
Magnesia	0.87	—	—
Metallic oxides	—	—	—

Thus it will be perceived that the fertile soils differ from the sterile, not only in the number of constituents, but in the proportion in which they are found to be combined. The productive quality of soils is influenced by the amount of absorption and emission of solar heat; when the proportion of absorption to emission is 5.76 : 1, it is highly favourable to agriculture; whenever it is 2.35 : 1, it is highly injurious. The extent of capacity of absorbing moisture is of course an important element in the successful prosecution of husbandry. The more or less soluble constituents determines the productive power of soils; as respects Australia, those that have thirty per cent. of soluble matter are best adapted for the former; those which have only eight are the least. The amount of vegetable matter in a soil appears to regulate the proportionate power of absorbing and of emitting heat, and of absorbing and of retaining atmospheric moisture. The importance of manuring, or, in other words, of feeding soils with the vegetable and other ingredients necessary for the food of plants, is therefore obvious; and some Australian cultivators now find their lands, after twenty years' successive cropping, without food or rest, reduced to the exhausted condition of an overworked animal, deprived of its sustenance and sleep.

The average production of wheat in Australia, on good soils, is from twenty to thirty bushels per acre, weighing from sixty to sixty-five pounds the bushel; in some districts forty and even fifty bushels have been obtained from an acre of land. Maize yields forty to seventy bushels nett, according to the quality of the soil, and the carefulness of the culture. The potato gives two crops in the year, and green peas are gathered in winter as well as in summer.

MINERALOGY.—New South Wales abounds with mineralogical treasures; gold, copper, and steel have been found—the first named in abundance—see Supplement. Coal exists in several districts, but especially in the country south of Hunter's river, which is an extensive coal-field, and where, as previously stated, the sea cliffs present a most interesting section of this stratum. The seams of coal are distinctly visible on the abrupt face of the cliffs, forming the south headland of the harbour of Newcastle, and may be traced for nine miles, when they abruptly terminate, suddenly bending downwards, and sinking below the level of the sea. From this place a long sandy beach and low land extend to the entrance of Lake Macquarie (Reid's Mistake), the south head of which rises into high cliffs, in which the coal strata again present themselves. Between the coal beds are strata of sandstone, and beds of clay slate, with vegetable impressions—sometimes, but more rarely, indurated claystone. Embedded in these strata, there is abundance of argillaceous iron ore; this is occasionally cellular and in layers, but for the most part it appears in the form of petrifications of trees and branches, irregularly dispersed. The coal is decidedly of vegetable origin, the fibre of the wood being often quite distinct, while the vegetable impressions in the clay slate, under and over the coal, are singularly beautiful; some of these subterranean plants appear to have been in full flower, so that a skilful botanist might ascertain even their species; and Mr. Berry thought he could distinctly ascertain the leaf of the *lamia spiralis*.

About three miles along the south coast of Newcastle, in an upright position at high-water mark, under the cliff and beneath a bed of coal, there was recently found the butt of a petrified tree, which, on being broken, presented a deep black appearance, as if passing into jet; and on the top of the cliff at Newcastle, embedded at about a foot

beneath the surface, lying in a horizontal position, and nearly at right angles to the strata of the cliff, the trunk of another tree was found, finely grained, both specimens being traversed by thin veins of chalcidony. In the alternating strata of the coal, which runs generally in three parallel horizontal beds, are found nodules of clay, ironstone, and trunks and stems of arundinaceous plants in ironstone; in one place a narrow bed of ironstone, bearing impressions of leaves, is remarkable; while thin laminae of the same mineral, the surface of which is traversed by square and variously shaped sections of the same, are seen on several parts of the shore, both in the face of the cliff parallel with the beds of coal, and extending into the sea, forming the strand at low water. Nor are these indications confined to the district of the sea-shore at Newcastle; thin beds of coal and iron may be seen along the banks of the Paramatta river, and in other places. Coal abounds in the vicinity of the burning Mount Wingen, and near the Kingdon chain of ponds, also at Moreton Bay.

The Newcastle (New South Wales) coal, analysed by count Strzelecki, gave—(one description)—charcoal, 62.8; bitumen, 25.2; earthy matter, 25.2. One pound of coal yielded one foot 1.806 cubic inches of illuminating unpurified gas. The gaseous mixture contained in 100 volumes, was—sulphuretted hydrogen, 10; carbonic acid, 10; olefiant gas, 17; carburetted hydrogen, 11; other inflammable gas, 52. Every 100 parts in weight, yielded—coke, 71.2; coal tar and ammoniacal liquor, 15.6; ultimate elements, deducting the earthy matter, carbon, 70.5; hydrogen, 20.4; nitrogen, 9.1. This coal burns easily, with a reddish flame, swells and agglutinates. It is of a black colour, even fracture, foliated structure, soft, and brittle; specific gravity, 1.31. The quality of this coal is about equal to the English Newcastle coal, it is now being extensively raised by the Australian Agricultural Company, who have a lease of the mines. A seam has been recently found ten feet thick; and there are, probably, other large outcrops of coal in the adjacent districts.

Copper ore of very rich quality, is found in great abundance; in the districts of Wellington the beds of ore are supposed to extend for miles in every direction, and according to the *Hawkesbury Courier*, "a high hill in the neighbourhood presents indications of being a solid mass of metal." The

Molong Mining Company are raising large quantities of ore for shipment to England; there is a rich vein of copper near Bathurst.

Iron abounds in various parts of the colony, and most of the smaller streams are impregnated with iron. A few miles north by west of Mount Wingen, are stumps of trees standing upright in the ground, apparently petrified, and strongly impregnated with iron.

It has been before stated, that in the neighbourhood of Camden, a mine has been opened where *steel*, according to Mr. Pattison, "is dug from the earth with little boring and of endless extent." He adds, that he saw a very handsome knife, made from the metal which had been worked without any overground preparation, by a Sydney cutler, as a present for the governor, Sir Charles Fitzroy; the handle being of native tortoiseshell, with a plate of native gold.

Gold undoubtedly exists in large quantities. Sir Thomas Mitchell, during his visit in 1847 to England, showed me beautiful specimens of gold embedded in white quartz, and stated that it was also obtainable in grains or pieces of considerable extent. He discovered the gold region while exploring the interior, and observed, that he was unwilling to notify the region, lest the colonists should leave their flocks and herds to go in search of gold. Many years since, that distinguished geologist, Sir Roderick Murchison predicted that gold would be extensively found in Australia, by reason of its geological formation, and the latitudinal direction of its mountain range; for it is a singular fact, that the gold districts yet discovered are in mountains, with a latitudinal rather than a meridional direction; to which it may be added, that the perturbing subterranean forces of the earth, as manifested in the Rocky mountains, the Andes, the Himalaya, or from Kamtskatka to Borneo, have a general axis from N. to S. [See Supp^t]

CLIMATE.—The seasons of New South Wales are the opposite of those of England, January being the middle of summer, and July of winter. The summer extends from the first of November to the first of March; the spring and autumn are brief, but well defined; the winter of a bracing coolness, with occasional frosts at Sydney, and snow in the interior. The spring months are September, October, and November; the summer, December, January, and February; autumn, March, April, and May; winter, June, July, and August. March, April, and

August are generally considered the rainy months. The average temperature of spring is 65° 5', of summer 72°, of autumn 66°, and of winter 55°. The barometrical pressure is about 29.94319 inches, and the average of the thermometer 64° Fahr. In Sydney, the thermometer is rarely below 40°; in Paramatta, it is frequently down to 27° in winter; and in my garden at Paramatta I have on a winter morning eaten frozen milk beneath an orange tree, from which I gathered the ripe and ripening fruit. Indeed, there is every variety of climate; by proceeding to the Blue mountains a cold winter may be enjoyed, or at Moreton Bay a warm one. Of course, as the land rises above the level of the ocean, a difference of temperature is felt; the winter at Bathurst, where the luxury of snow is in its season enjoyed, being much colder than on the sea shore. Of the peculiarly salubrious climate of Australia I can gratefully bear record, having proceeded to Van Diemen's Island and New South Wales, from the east coast of Africa, while suffering from a severe fever, acquired while exploring the rivers and country adjacent to Mozambique; and in a few months the fever and its distressing consequences entirely disappeared. The air is remarkably elastic; old persons arriving in the Australian colonies from Europe, find much of the hilarity of youth restored to them. Not more than five or six sick persons will be found in a community of twelve or fifteen hundred; at some of the military stations seven years have elapsed without the loss of a man; several colonists are stated to be upwards of 100 years of age; I saw one woman who was said to be 125 years of age; and the singularly horny texture of her skin seemed to confirm the almost incredible statement, yet she went about her daily work at a road-side inn. In New South Wales, during summer, I frequently slept in the open air, without the slightest injurious consequences; and during the expeditions of Mitchell, Sturt, Leichardt, Eyre, and other explorers, they lived for months without any other canopy than the clear blue Australian sky; and notwithstanding scanty and inutritious or saline food, they enjoyed wonderfully good health, such as they could not probably have maintained under similar circumstances in any part of the world. It is said to be owing to the fineness of the climate that dogs do not go mad in Australia, that horses are seldom or never known to kick, that herds of wild cattle have a degree of

tameness unknown on the Pampas of South America, and that the descendants of Europeans are remarkable for an equanimity of temper, which is probably partly attributable to the salubrity of the climate.

The following table exhibits the range of the barometer and thermometer for each month in the year, the state of the hygrometer, and the prevailing winds, and weather at Sydney:—

Months.	Barometer, 62 feet above the sea.		Hygrometer.		Radiator.		Thermometer.			Winds.	Weather.				
	Maximum.	Minimum.	Max.	Min.	Max	Min	Max.	Med.	Min.		Days Fine.	Days Rain.	Stormy.	Cloudy.	Stormy and Cloudy
Jan. .	30.300	29.430	68	9	101	63	91	75½	60	S.S.E.	15	4	12	—	—
Feb. .	30.300	29.680	75	35	94	48	90	74	58	E.S.E.	20	4	5	—	—
March	30.490	29.580	74	10	83	42	83	71½	60	E.	19	10	2	—	—
April.	30.458	27.772	78	40	87	53	83	70	57	W.	21	6	—	3	—
May .	30.442	29.602	79	26	66	35	73	61½	50	W.	23	3	—	5	—
June .	30.350	29.290	78	25	67	32	62	52	42	S.W.	20	1	—	9	—
July .	30.315	29.840	76	27	59	26	60	54	48	S.W.	17	8	5	—	1
Aug. .	30.248	29.488	78	29	67	31	66	55	44	S.W.	14	9	7	—	1
Sept. .	30.380	29.520	79	18	83	34	67	49½	42	N.E.	20	—	8	—	2
Oct. .	30.200	29.300	80	20	86	42	82	69½	57	N.E.	21	3	5	—	2
Nov. .	30.220	29.860	76	10	84	51	91	74	57	E.&W.	31	—	—	—	—
Dec. .	30.110	29.530	72	30	96	59	87	75	63	N.E.	20	—	10	—	1
Year .	30.490	29.290	80	9	101	26	91	—	28	—	241	48	54	17	7

According to a meteorological register kept for five years, at the south head of Port Jackson, a naked sandstone cliff, exposed to high calorific effects from solar radiation, the *extreme* range of the barometer was 1.140 inch, and its *mean* range 1.0594 inch, or, in round numbers, about one inch to one-sixteenth. The same general law which influences the barometer in Europe, operates in Australia; the mercury rises with the polar and falls with the equatorial wind; *i.e.*, in Europe a northerly wind would cause an elevation of the barometer; in Australia a southerly wind produces the same effect, in both hemispheres an equatorial wind would cause a fall.

The annual *mean* of the external shade of the barometer at the same place, was—

	1840.	1841.	1842.	1843.	1844.
For the year.	63.186	64.656	62.72	62.73	61.49
April . . .	67.23	67.66	61.46	63.62	60.31
October . .	68.16	62.76	63.47	61.07	61.12
Summer . .	—	—	68.390	67.987	66.731
Winter . .	—	—	57.055	57.473	56.245
Difference.	—	—	11.335	10.514	10.486

Note.—April corresponds to mid-autumn in England, October to mid-spring.

Annual Mean Temperature at Port Jackson.

Years.	Summer.	Winter.	Difference.
1842	68.390	57.055	11.355
1843	67.987	57.473	10.514
1844	66.731	56.245	10.486

DIV. I.

Sydney (Port Jackson) may be compared with a port to the northward and another to the southward, thus—

Thermometrical Range.	Port Macquarie, Lat. 31° 25'.	Port Jackson, Lat. 33° 51'.	Port Phillip, Lat. 38° 18'.
Summer:—			
Maximum . .	88.3	81.9	90.6
Minimum . .	61.8	59.0	48.8
Fluctuation . .	26.5	29.9	41.8
Mean	75.0	73.9	69.4
Winter:—			
Maximum . .	75.3	73.3	69.8
Minimum . .	46.8	45.3	36.9
Fluctuation . .	28.5	28.0	32.9
Mean	61.0	59.3	53.3
Annual Mean . .	68.0	66.6	61.3
Annual Fluctuation	27.5	28.2	37.3
Warmest Month .	Nov.	Nov.	Nov.
Coldest Month . .	August	July	July

The registers from which the above are taken were kept for the three years ending with 1842. It will be observed that the highest annual fluctuation of the three stations is at Port Phillip, *viz.*, 37.3; but at Quebec it is, 59; at St. Petersburg, 57; at New York, 55; Buda, 44; at Warsaw, 43.2; at Philadelphia, 43.3; at Vienna, 43; Copenhagen and Zurich, 38.9; Milan, 38.4.

In the southern hemisphere snow is perpetual at 6,000 feet above the sea, in Europe at 10,000 feet. This may be partly attributed to the great extent of ocean in the south, and the absence of any intervening

land between the south pole and Australia, whereby there is at least a difference of five degrees of latitude in regard to temperature. Considerable allowance must also be made for the direction, intensity, and thermometrical condition of different currents of air. Thus, in ascending Mount Kosciuszko, in the Australian Alps, Count Strzelecki found the stratum of air at 3,000 feet much colder than that at the elevation of 6,500 feet. So also at Mount Roa (Sandwich Islands) three different currents were noted; one at Byron's bay, light from the S.E., temperature 86°; one at an elevation of 4,000 feet, strong from the westward, temperature 55°; and one at 6,000 feet, brisk N.W., temperature 67°. A hail storm on Ben Lomond in Van Diemen's Land was observed to originate in a stratum of air far below the point of congelation, and moving between an elevation of 800 and 5,000 feet, *i.e.*, between Ben Lomond, in a temperature of 56°, and the Vale of Avoca, 4,200 feet lower down in 80°. This storm was succeeded by a polar wind. At the Cordilleras in Chili snow has been found melting at 15,000 feet elevation, while it was unaltered at 10,000 feet. So also rain sometimes falls in Australia when the temperature near the earth is below the freezing point. My own theory of these phenomena is that heat is produced by the electricity emanating from the sun, and the magnetism contained in the earth being brought into contact; the sun itself being not a body of fire, but an evolver of the electric fluid, which on being poured *perpendicularly* on the earth, elicits terrestrial magnetism, and heat is the product. Hence, at a certain distance from the earth, even within the torrid zone, there is no caloric, but a region of perpetual snow, as intensely cold as at the arctic circle, where also the rays of the sun fall only obliquely, and not *direct*.

It is probably this constant evolvment of heat from the surface of the earth, which causes the unceasing oscillations of the atmospheric currents, not only affected by the increasing or decreasing declination of the sun, but also by a different cause, *i.e.*, an upper current of cold air, descending to one of warmer temperature nearer to the earth, it displaces, and is in its turn displaced when the oxygenized or electric matter with which it was charged has been expended in the support of animal and vegetable life.

Rain.—The quantity which falls in Australia is considerable; the following shows

the total quantities registered as fallen, with the respective number of days, at South Head, Port Jackson, 240 feet above the mean tide level:—

Year.	Number of Inches.	Number of Days.
1840 (9 months)	49.65	108
1841	76.31	142
1842	48.32	137
1843	62.78	168
1844	70.67	157
Total	307.73	712

out of, and comprehending a period of four years and nine months = 1,736 days.

Two extraordinary falls of rain have occurred during this period, *viz.*, one of 20.12 inches, on 29th April, 1841, during heavy squalls from E.N.E.—E.S.E.; the other, 20.41 inches, on 15th October, 1844, wind between S.E. and S.W.

Strzelecki gives the annexed return for New South Wales and Van Diemen's Island, which includes 8,730 days of observation, brought to the term of averages for every season at each station:—

Station.	Summer.	Winter	Annual Quantity.	Average number of inches.
New South Wales:				
Port Macquarie	37.58	25.10	62.68	} 48.60
Port Jackson	24.42	28.00	52.42	
Port Phillip	13.25	17.47	30.72	
Van Diemen's Island:				
Woolnorth	19.68	29.07	43.75	} 41.28
Circular Head	11.31	24.11	35.42	
Port Arthur	16.94	17.75	44.69	

Rain sometimes pours down in continuous torrents in Australia; one fall, during twenty-four hours, at Port Jackson, amounted to twenty-five inches. Mitchell, Sturt, and other explorers found marks of extraordinary floods in the Nammoy and other rivers; ten to fifteen feet above the ordinary level of a river is not an unusual height during a season of rain. The above record of rain annually falling, will dissipate a prevailing idea that but little moisture exists in Australia; the average annual fall in London, is 22.19 inches, in New South Wales, 48 inches; in Van Diemen's Island, 41 inches per annum.

It must, however, be admitted, that with a comparatively high temperature and thirsty soil, Australia requires a far larger amount of moisture than England, and that the effect is more beneficial with a smaller quantity, in the

latter-named country, than that derived from a larger quantity in the former region. At Port Macquarie, where the heat of summer is intense, more rain falls during that season (thirty-seven inches), than in the whole year at Port Phillip (thirty inches), where the climate is less torrid, and the land less exposed to the parching effects of the hot winds. It may be, also, that there is a greater amount of absorption of solar rays, and radiation, or emission of heat, in New South Wales—in some parts of Australia—than in others; for it is stated by Strzelecki, that on some soils all the early crops are invariably injured by the frost, while on other soils such injury never takes place.

The prevailing directions of the winds at Sydney are thus indicated:—


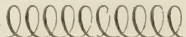
Wind's Direction.	Morning.	Noon.	Evening.
North	4	7	23
North-north-east	—	11	11
North-east	12	129	109
East-north-east	—	11	5
East	4	3	8
East-south-east	1	2	5
South-east	9	45	70
South-south-east	8	27	13
South by East	1	5	4
South	29	31	15
South by West	3	2	4
South-south-west	8	11	8
South-west	109	35	45
West-south-west	42	5	3
West by South	4	2	1
West	118	10	8
West by North	2	—	—
West-north-west	6	2	3
North-west	4	16	19
North-north-west	1	8	5
North by West	—	—	2

During the summer months a regular sea breeze sets in daily, and refreshes the inhabitants along the coast. The direction, humidity, and siccidity of the winds in Australia, are, doubtless, influenced by the general laws which govern the atmospheric circulation; but these laws are modified by various local circumstances, such as the extent and form of the island-continent, and the vastness of the surrounding ocean. Winds from the northerly and southerly quarters are the most numerous; in winter, on an average of 100 winds, 60 proceed from the southerly quarter, making the proportion of the polar to the equatorial, as 3 : 1; in summer, of 100 winds, 42 are from the northerly quarter—polar to equatorial, 1 : 2. These proportions vary at Port Phillip and other stations owing, probably, to the posi-

tion and configuration of the land. At Port Jackson the winter is marked by the prevalence of polar winds, and the summer by that of equatorial; at Port Phillip, the equatorial prevail in winter, and the polar in summer; and in Van Diemen's Island the equatorial winds prevail during both summer and winter.

The *hot winds* of Australia have engaged the attention of geologists, as well as of meteorologists; they are supposed to originate in the central deserts. The intense heat of these winds raises the thermometer, in the shade, to 117°, or even 120°, Fahr.; the grass becomes dry, like hay; the fig is destroyed; the red and blue grape lose their colour and watery elements; green leaves lose their colour, turn yellow, and wither; and the promising harvest of the agriculturalist is frequently ruined. Westward of the Blue mountain range, the temperature of a summer day is increased by this wind 40°; on the eastward of the range, from 25° to 30°. The effects of this wind on the animal frame, are stated, on the authority of captain Sturt. I have, however, myself, ridden for the greater part of the day, in New South Wales, during the prevalence of these siroccos, and felt less fatigue than from a slight exertion during the rainy season in Bengal. In the latter instance, the atmosphere was saturated with moisture; in the former, the air was totally deprived of all humidity. Count Strzelecki experienced the hot wind with great violence sixty miles at sea, in the parallel of Sydney, and found the sails of the ship covered with an impalpable sand, containing one-fourth of aluminous and three-fourths of silicious and metallic matter; he also experienced it at the top of Ben Lomond, at an elevation of 5,000 feet, but did not feel it at 3,000 feet lower, to the windward. It does not appear that this current of heated air is confined to any particular altitude, but rushes from a lower to a higher stratum of air, according to circumstances. Not unfrequently, during the prevalence of this wind, the high clouds, cirrus, and strata, at once disappear, while the lower remain unchanged; I noticed, also, that at night the air was filled with what is termed "sheet lightning," which exhibited sometimes the beautiful coruscations of the aurora borealis.

The mean direction of this wind in New South Wales is from the north-west, and its velocity sometimes exceeds a regular gale; occasionally it has a *ricochet* movement

thus—
 or appears produced by a rotation on a set of horizontal axes, thus—

There are no noxious gases in these hot winds, and they do not exercise any deleterious effect on the health of man: they bear some affinity to the hot winds experienced in the Mediterranean, in Egypt, Arabia, Persia, Bombay, and Mexico; but whether these all belong to a common system

of atmospheric circulation, or are caused in the several countries by local circumstances, it is not easy to decide authoritatively; and my own impression is, that the form, extent, and latitude of the regions where they prevail—the characteristics of the soil, and the quantity and nature of the vegetation, all exercise a powerful influence in the production of hot winds during summer.

A good idea of the climate of Australia may be formed from the following comparison:—

Station	Summer.	Winter.	Annual Mean.	Thermometrical Fluctuation.
Port Macquarie, classed with	Florence, Naples	Funchal	Tunis	Dublin.
Port Jackson, ditto	Avignon, Constantinople, Philadelphia, U.S.	Cairo	Messina	Paris.
Port Phillip, ditto	Baden, Marseilles, and Bordeaux	Palermo	Naples	Montpellier.

The summer represents that of western Europe, between 41° and 55° N. lat; the winter, that part of the Mediterranean between the coasts of Spain, Italy, France, and Algiers, extending to Tunis and Cairo. It is probable that the extension of cultivation, the pernicious custom adopted by Europeans, of burning the surface of the land, to obtain a new crop of grasses, and the extensive forest conflagrations caused by the carelessness of the aborigines in scattering fire, or by the friction of dry trees, have contributed to increase the mean annual temperature of Australia since its colonization.

Rapid growth, and early development of the intellectual as well as physical structure, characterize human life in New South Wales, especially among females. At fifteen, a girl possesses all the charms, and many of the graces, of womanhood; but it must be admitted, that at the age of thirty, her bloom has passed away, although the vigour of existence is unimpaired. The springs of life seem to attain a rejuvenescence in those arriving from Europe. Numerous instances occur of persons arriving in the colony at sixty, and upwards, who acquired new vigour, and attained a hundred years of age.

Although we are still ignorant of the almost recondite laws which govern the increase or decrease of life, I cannot but consider that the progressive augmentation of female over male births, the lesser proportion of female to male deaths, and the annually decreasing mortality of both sexes, as positive and convincing proofs of the adaptation of a climate for the dwelling-place of man. On this subject various

data will be found in the chapter on population. Between 1836 and 1846, the proportion of females to males had more than doubled. In the year 1844, the net increase of female births over the year 1843, was 7.81 per cent.; that of males, only 2.88 per cent. This indicates a *positive* increase. The *comparative* mortality is equally remarkable. In 1844, the deaths of *males*, in proportion to the whole male population, was one in 78; of *females*, only one in 89.24. In proportion to the births of males, the deaths of males was one in 3.62; whilst those of females was only one in 5.2. In 1844, the deaths were in the ratio of 32 to 100 births: in 1844, 27 deaths to 100 births. The relative annual mortality in New South Wales, from 1828 to 1840, one in 55.15: in 1841, one in 62.36: in 1842, one in 58.85: in 1843, one in 73.19: in 1844, one in 81.98. The average mortality in England is about one in 53. According to the official returns, the mortality of the colony has undergone an actual and relative decrease since 1842.

The proportions of the births to the deaths is very remarkable; there is not *one death to three births*; in England there are two deaths to three births.

According to the registered returns, which are not very perfect, the numbers of births in New South Wales were in the following proportions to the numbers of deaths:—

1846	332	} Births to 100 deaths.
1847	331	
1848	341	

In England, the proportion of births to deaths is not more than half of this.

The proportion of births and deaths throughout the year, to the whole population living at the end of it, was:—

In 1846, 36 births, 11 deaths	} To 1,000 living.
1847, 43 „ 13 „	
1848, 40 „ 12 „	

In England, the births have averaged 32, and the deaths 22, to 1,000 living.

The rate of mortality in 1848 was 1 in 85. In England it is 1 in 47; in Canada, 1 in 49; in the United States, 1 in 37.

Colonel Tulloch, who has registered many valuable observations, connected with the health and duration of life at the different stations of the British army, informs me that he considers the salubrity of Australia quite on a par with that of the United Kingdom. For instance, the mortality of troops serving in the various garrisons of Great Britain and Ireland is about one-and-a-half per cent annually; and the casualties of every denomination of a regiment of the line, from the period of its embarkation from England, and during the whole of its service in the widely scattered posts of Australia, Van Diemen's Island, and New Zealand, is no more than one-and-a-half per cent. It may on these grounds be said that the mortality is less in Australia than in England.

I have been favoured by Colonel Tulloch with the following comparative statements of the mortality among the British troops serving in different parts of the empire. This table shews a great saving of life, during the last ten years. Other circumstances as well as climate, have their influence on the duration of the life of soldiers, such as the locality of the barracks, the employment of the troops, and the congregating of men in large masses.

Average Mortality per thousand of White Troops annually.

Colonies.	For 20 yrs. ending in 1836.	For 10 yrs. ending in 1846.
New South Wales	14	11
Windward and Leeward Islands	78 $\frac{5}{10}$	68 $\frac{7}{10}$
Jamaica	121 $\frac{1}{10}$	66 $\frac{9}{10}$
Gibraltar	21 $\frac{1}{10}$	10 $\frac{9}{10}$
Malta	16 $\frac{3}{10}$	14 $\frac{9}{10}$
Ionian Islands	25 $\frac{1}{10}$	15 $\frac{3}{10}$
Bermudas	28 $\frac{5}{10}$	29 $\frac{3}{10}$
Nova Scotia and New Brunswick	14 $\frac{7}{10}$	13
Canada	16 $\frac{1}{10}$	12 $\frac{6}{10}$
Newfoundland	14	9 $\frac{1}{10}$
St. Helena	34 $\frac{9}{10}$	15 $\frac{1}{10}$
Cape of Good Hope	13 $\frac{1}{10}$	13
Mauritius	27 $\frac{1}{10}$	24 $\frac{4}{10}$
Ceylon	69 $\frac{3}{10}$	41 $\frac{1}{10}$

In the year 1849 the ratio of mortality among the white troops in our different colonies, was as follows:—

In Australia, 8; British Guiana, 14.2; Trinidad, 33; Tobago, 98.6; Grenada, 12.3; St. Vincent's, 6 Barbadoes, 128.8; St. Lucia, 17.4; Dominica, 40.4; Antigua, 10.9; St. Kitt's, 19.4; Windward and Leeward combined, 68.4; Jamaica, 48.3; Gibraltar, 8.4; Malta, 30.1; Ionian Islands, 23.1; Bermuda, 8.4; Newfoundland, 10.3; Nova Scotia and New Brunswick, 19.7; Canada, 15.6; St. Helena, 8.4; Cape of Good Hope, 13.3; the Mauritius, 14.6; Ceylon, 21.5; Madras, 22.4; Bengal, 61.3; Bombay, 26.6.

Comparing the foregoing mortality with that of the troops in the United Kingdom, the superiority of the Australian climate will be manifest:—

Average Mortality per thousand of Troops employed.

United Kingdom.	For 7 years previous to 1836.	For 10 yrs. ending in 1846.
Household Cavalry	14 $\frac{5}{10}$	11 $\frac{1}{10}$
Dragoon Guards and Dragoons	14 $\frac{3}{10}$	13 $\frac{2}{10}$
Foot Guards	21 $\frac{1}{10}$	20 $\frac{7}{10}$
Regiments of the Line	18 $\frac{5}{10}$	17 $\frac{9}{10}$

The maladies to which flesh is heir assume a milder type in Australia than in Europe; and it cannot be said that there are any endemic complaints. The diseases most prevalent in the six principal gaoles of the colony in 1848, were—those of the brain and nerves, 75; circulatory organs, 20; respiratory organs, 154; alimentary canal, 282; hepatic, 9; eyes, 63; skin, 35; cellular texture, 28; fevers, 10; rheumatic, 84; dropsy, 1; scorbutic, 31; ulcers, 85; pregnancy and parturition, 6; wounds and accidents, 36; hernia, 1; teeth, 11; vermin, 25; other diseases, 119; children, 31. Total, 1,158. The deaths during the year were—males, 13; females, 1. Total, 14. I venture to say, that in none of the hospitals attached to any of the gaoles or poor-houses in England, would 1,158 cases of disease similar to the above be treated so successfully. No cases of Asiatic cholera have occurred in Australia. Different forms of mania have presented themselves within the last few years, and the malady is increasing in New South Wales.

It would be very desirable if the excellent hospitals which exist at Sydney, Paramatta, and other towns, would publish periodical statements of the number and description of the different diseases treated, and of the mortality in each establishment. This would form a striking corroborative proof of the remarkable salubrity of the Australian climate.

CHAPTER III.

POPULATION OF NEW SOUTH WALES—FREE AND BOND, PROGRESSIVE AUGMENTATION SINCE 1788, STATE OF RELIGION, EDUCATION, AND CRIME.

THIS territory, when first occupied by the British, on the 26th January, 1788, was thinly peopled by a dark-coloured race of aboriginal tribes, whose appearance, character, manners, and customs will be described in a subsequent portion of this work. In the present chapter, therefore, attention will be directed to the numbers and condition of the Anglo-Saxon Australians in New South Wales.

The six transports which sailed from England, 13th May, 1787, for the foundation of the colony of New South Wales, contained the embryo from which the present population of the province, aided by immigration, has been formed. The transport, *Alexander*, contained 210 men convicts; the *Scarborough*, 210 ditto; the *Friendship*, 80 men, and 24 women, convicts; the *Charlotte*, 100 men, and 24 women, convicts; the *Prince of Wales*, 100; and the *Lady Penrhyn*, 102 women convicts. Total, 608 male, and 250 female convicts. Two convicts on board the *Alexander* received a pardon before sailing. The grand total which sailed was stated to be 828. A guard of marines was placed on board of each ship, and numbered, with officers, 212. There were twenty-eight women—wives of marines (who were to form the garrison of the new colony), carrying with them seventeen children. Emigration from England was studiously discouraged for several years; but owing to the number of convicts sent out, and the fineness of the climate, the population rapidly increased. According to a parliamentary return of 1812, the state of the colony in 1810 was—(1). Civil department, victualled, men, 37; women, 1; children, 3: (2). Military department, men, 1,416; women, 219; children, 414: (3). Free persons, victualled, men, 307; women, 183; children, 198: (4). Prisoners, victualled from the public stores, men, 1,132; women, 151; children, 154:—total number victualled from public stores, 4,277: (5). People not victualled from public stores, men, 1,906; women, 1,644; children, 1,938: settlers not victualled from public stores, men, 715; women, 22. Total number of souls in the settlement, 10,452.

The early censuses are said to be incomplete. The increase has been as follows:—

Year.	Population.	Year.	Population.
1788	1,030	1833	60,861
1810	10,452	1836	77,096
1821	29,783	1841	120,856
1828	36,598	1846	154,534

The estimate to 31st December, 1848, is 220,474. The number of inhabitants, (including the Port Phillip district,) may now be quoted, in round numbers, at a quarter of a million.

In a return laid before the Legislative Council of New South Wales by the able colonial secretary, Mr. Deas Thompson, on the 12th June, 1849, and by Mr. Mansfield's analysis of the census of 1841, the increase of the population, male and female, since 1821, is thus shewn:—

Years.	Adults.		Children.	Total.
	Males.	Females.		
1821	21,693	8,090	Not separated.	29,783
1828	27,611	8,987		36,598
1833	44,688	16,173		60,861
1836	87,298	43,558		130,856
1839	63,784	21,998	28,604	114,386
1840	70,021	25,476	33,966	129,463
1841	75,474	33,546	40,649	149,669
1842	76,528	35,762	47,599	159,889
1843	76,147	35,474	53,920	165,541
1844	74,912	36,170	62,295	173,377
1845	74,951	36,223	70,382	181,556
1846	82,847	42,287	71,570	196,704
1847	83,572	41,809	79,628	205,009
1848	86,302	44,562	89,610	220,474

The progressive augmentation of the female population will be perceived from the foregoing table; this did not arise solely from female emigration, but from the large proportion of female to male births—a proportion which I observed in Australia pervaded the whole range of domestic animals. It seems to be a law of population, that where there is room in a new country, and the command to "increase and multiply" is not perverted by polygamy, there is always a larger proportion of female than male births; but in an old established country, fully peopled, a check is put to an injurious increase by a

CONVICTS SENT TO NEW SOUTH WALES FROM 1787 TO 1843. 167

greater proportion of male than female births. Under a system of slavery there is also a preponderance of male over female births; from which it naturally results that a slave or bond population, if unrecruited by fresh supplies, would in process of time become extinct.

What proportion of the population of New South Wales consisted of convicts and of their descendants it is not possible to state. The number of convicts annually sent from Great Britain to New South Wales, from 1787 to 1843, was—

Years.	Males.	Females.	Total.
1787	184	100	284
1789	994	245	1,239
1791	2,121	286	2,407
1792	314	54	368
1793	1	—	1
1794	35	59	94
1795	1	131	132
1796	206	—	206
1797	313	67	380
1798	395	—	395
1799	—	53	53
1800	503	90	593
1801	203	94	297
1802	543	130	673
1803	494	136	630
1805	1	118	119
1806	272	34	306
1807	189	113	302
1808	202	175	377
1809	260	62	262
1810	200	120	320
1811	400	99	499
1812	400	167	567
1813	500	119	619
1814	800	232	1,032
1815	693	101	794
1816	1,186	101	1,287
1817	1,040	101	1,141
1818	1,912	128	2,040
1819	1,421	148	1,569
1820	1,726	121	1,847
1821	946	171	1,117
1822	856	57	913
1823	491	119	610
1824	1,004	81	1,085
1825	602	59	661
1826	844	88	932
1827	1,401	260	1,661
1828	1,732	298	2,030
1829	2,278	220	2,498
1830	1,751	337	2,088
1831	1,605	250	1,855
1832	1,992	206	2,198
1833	2,310	420	2,730
1834	2,336	144	2,480
1835	2,146	298	2,444
1836	2,029	259	2,088
1837	1,734	140	1,874
1838	1,716	344	2,060
1839	1,096	143	1,239
1840	575	213	788
1843	199	—	199
Total . . .	47,092	7,491	54,383

It appears that during a period of forty-eight years the number of convicts sent to New South Wales was, of males 43,506, of females 6,791: total 50,297. This is exclusive of convicts sent to Van Diemen's Island, to which separate transportation commenced in 1817, and from that year to 1837 the number of convicts sent to that island was, males 24,785, females 2,974: total 27,759; making a grand total deported to Australasia during the period, of males 68,291, females 9,765 = 78,056.

Transportation to New South Wales, except the deportation of a few exiles from Pentonville and other places, ceased in the year 1839, and the total number of convicts transported to that settlement may be stated in round numbers at, males 52,000, females 8,706 = 60,706. The convict population is thus stated since 1820:—

Years.	Males.	Females.	Total.
1820	18,067	2,189	20,256
1833	21,845	2,698	24,543
1836	25,254	2,577	27,831
1841	23,844	3,133	26,977
1846	9,653	902	10,555

The proportion of free to bond population, of each sex and age, in the colony is thus shewn in 1828 and 1833:—

Census.	Free Males.			Male Convicts.	Free Females.			Female Convicts.
	Above 12 Years.	Under 12 Years.	Total.		Above 12 Years.	Under 12 Years.	Total.	
	1828	10621	2835		13456	14155	4538		2936	7474	1513
1833	17542	5256	22798	21845	8522	4931	13453	2698

In 1834 the number of "emancipists" in the colony was about 16,000, and the remainder of the free population was about 21,000.

The country to which the several convicts belonged, is not stated for the entire period. From 1828 to 1836, those from Great Britain and Ireland were:—

	Males.	Females.	Total.
Great Britain . . .	17,876	2,194	20,070
Ireland	8,079	1,941	10,020

During the eight years ending 1836, the number of persons free by servitude was, males 7,788, females 1,363 = 9,151. Absolutely pardoned, males 62, females 2 = 68. Conditionally pardoned, males 543, females 22 = 565.

The following abstracts of the population of each sex, distinguishing those born in the colony, or arrived free from other places, and also the number of bond persons holding tickets of leave, in government employment, and in private assignment respectively:—

Counties in New South Wales. [Census of 1851 given in SUPPLEMENT, Appendix A.]	Males Free.		Males Bond.			Females Free		Females Bond.			Totals.		
	Born in the Colony or arrived free.	Other free Persons.	Holding Tickets of Leave.	In Government Employment.	In private Assignment.	Born in the Colony or arrived free.	Other free Persons.	Holding Tickets of Leave.	In Government Employment.	In private Assignment.	Males.	Females.	General Total.
Argyle	1758	852	412	2	15	1650	200	16	—	6	3039	1872	4911
Bathurst	1555	899	306	15	24	1418	148	18	2	6	2799	1592	4391
Bligh	186	139	92	1	2	160	17	1	—	—	420	178	598
Brisbane	488	278	153	1	16	430	37	2	—	1	936	470	1406
Camden	3347	1125	448	10	22	3081	251	25	—	14	4952	3371	8323
Cook	1282	570	128	137	5	1316	142	11	1	6	2122	1476	3598
Cumberland	32348	5345	1180	1138	231	30761	1957	209	234	132	40242	33296	73538
Durham	3112	916	409	2	31	2869	180	26	—	9	4470	3084	7554
Georgiana	325	239	60	—	13	285	31	—	—	—	637	316	953
Gloucester	1040	232	187	—	33	864	37	4	—	2	1492	907	2399
Hunter	466	186	41	1	1	453	39	3	—	—	695	495	1190
King	572	372	119	—	4	524	71	1	—	2	1067	598	1665
Macquarie	535	217	219	294	62	580	53	10	—	3	1327	646	1973
Murray	992	513	289	1	8	814	89	14	—	1	1803	918	2721
Northumberland	5036	1720	597	338	59	5035	473	62	1	14	7750	5585	13335
Phillip	229	143	54	—	6	179	27	1	—	2	432	209	641
Roxburgh	859	466	177	—	2	746	88	12	—	3	1504	849	2353
St. Vincent	748	340	186	—	34	744	41	8	—	1	1308	794	2102
Wellington	315	288	100	—	8	225	27	7	—	—	711	259	970
Westmoreland	597	322	72	1	3	519	54	6	—	1	995	580	1575
Stanley (Moreton Bay)	716	190	128	81	7	455	20	1	—	1	1122	477	1599
Auckland (Twofold Bay)	480	217	54	—	2	304	28	2	—	1	753	335	1088
Total	56986	15569	5411	2022	588	53415	4010	439	238	205	80576	58307	138883
Commissioners' Districts beyond the Limits of Location.													
Bligh	250	287	71	2	5	166	6	1	—	—	615	173	788
Clarence River	541	242	71	—	15	337	18	1	—	—	869	356	1225
Darling Downs	245	236	64	4	3	100	4	—	—	2	552	106	658
Lachlan	799	583	176	2	9	577	50	2	—	—	1569	629	2198
Liverpool Plains	670	813	261	6	28	296	32	3	—	1	1778	332	2110
M ^o Leay River	144	99	71	6	20	111	12	1	—	2	340	126	466
Menaroo	757	447	104	7	6	554	32	4	—	5	1321	595	1916
Moreton Bay	87	95	39	—	3	42	2	—	—	—	224	44	268
Murrumbidgee	1003	618	160	1	8	717	52	2	—	1	1820	772	2592
New England	707	691	339	4	15	428	44	3	—	—	1756	475	2231
Wellington	373	464	119	2	11	205	23	1	—	1	969	230	1199
Total	5576	4605	1475	34	123	3533	275	18	—	12	11813	3838	15651
Total Population of the Middle District	62562	20174	6886	2056	711	56948	4285	457	238	217	92389	62145	154534

It will be perceived from the foregoing, that the free males born in the colony, or who have arrived free, are nearly equal in number to the same class of females—viz., 62,562 and 56,948; but that great disproportion of sex exists between the emancipist class—viz., 20,174 males to 4,285 females; also between the bond—viz., 9,653 males, and 912 females.

The total males to females in the colony, in 1846, was 92,389 males to 62,145 females. This difference is every year diminishing: and the laudable efforts of the Right. Hon. Sydney Herbert to afford to distressed sempstresses, and other impoverished women, a means of emigrating to Australia, must eventually benefit the colony. Whatever doubts may

be cast on this benevolent project, I have no fear that injury can accrue from the measure; for it is well known, generally speaking, that as men find in New South Wales "honesty is the best policy," so also women, removed from the snares of vice and temptations which beset them at every step in England, find in New South Wales, that "virtue is its own reward;" and there are many instances of thorough reclamation of character in Australia of persons who, if they had remained at home, would have trodden with fearful rapidity the downward road to ruin.

The census of 1846, presents within the limits of location, the following comparison with those of 1841, 1836, and 1833:—

Counties.	1846.	1841.	1836.	1833.
Argyle	4911	3397	2417	2850
Bathurst	4391	2465	1729	3454
Bligh	598	546	376	..
Brisbane	1406	1560	1378	229
Camden	8323	6286	3161	2648
Cook	3598	2892	2052	1465
Cumberland	73538	58108	39797	35844
Durham	7554	6238	3208	3303
Georgiana	953	749	575	..
Gloucester	2399	1424	854	583
Hunter	1190	999	808	..
King	1665	598	544	..
Macquarie	1973	2409	1300	744
Murray	2721	2111	1728	510
Northumberland	13325	9975	5016	4606
Phillip	641	453	247	..
Roxburgh	3353	1520	1980	..
St. Vincent	2120	1762	592	445
Wellington	970	510	530	1903
Westmoreland	1575	619	579	1218
Stanley (Moreton Bay, &c.) } Auckland (Twofold Bay) }	1599	2187	3858	1218
1088	..	..	..	..
Total	139891	106808	72,729	59,802

The gross increase of population during the five years ending March, 1846, was, males, 27,471; females, 31,282 = 58,753. Increase per cent, during the same period, males, 31.46; females, 71.84 = 44.89. Centesimal proportion of the sexes:—in 1846, males, 60.53; females, 39.47 = 100; in 1841, males, 66.71; females, 33.29 = 100. The inequality of the sexes is undergoing a gradual correction. The proportion of females to 100 males was—1836, 30; in 1841, 50; in 1842, 59; in 1843, 60; in 1844, 63.

The number of free immigrants who arrived in New South Wales and Port Phillip since the formation of the colony is not ascertainable. Between 1828 and 1848, the numbers are imperfectly stated thus:—

Years.	Men.	Women.	Children.	Total.
1828	200	122	274	596
1829	306	133	145	564
1830	166	70	73	309
1831	189	98	174	457
1832	819	706	481	2,006
1833	838	1,146	701	2,685
1834	571	596	397	1,564
1835	551	644	233	1,428
1836	524	807	290	1,621
1837	1,769	1,138	1,365	4,275
1838	3,631	2,152	3,077	8,840
1839	5,843	3,719	3,796	13,358
1840	5,159	5,457	2,056	12,662
1841	—	—	—	—
1842	—	—	—	6,823
1843	—	—	—	2,558
1844	—	—	—	2,181
1845	—	—	—	496
1846	—	—	—	111
1847	—	—	—	6,563
1848	—	—	—	13,977

Between 1841 and 1847, viz., for seven years the immigrants who arrived in New South Wales, consisted of 9,210 English, 2,606 Scotch, and 20,896 Irish = 32,709. No emigrants were sent out to New South Wales, by her Majesty's Emigration Commissioners from 1844 to 1846.

The census of the province taken on 2nd March, 1846, affords satisfactory evidence of the progress and position of the colonists, and furnishes an excellent basis for the statistical supplement which it is my intention to issue every seven years, in order that the value of the original work may be preserved unimpaired. The following details, when examined with the accompanying map, will, doubtless, prove interesting in this country to those who have friends and relatives in the colony.

The census of 2nd March, 1846, of the Commissioners' Districts beyond the limits of location, presents the following comparison with those of 1841, 1836, and 1833:—

Districts.	1846.	1841.	1836.	1833.
Bligh	788	No details.	No details.	Not occupied.
Clarence River	1225			
Darling Downs	658			
Lachlan	2198			
Liverpool Plains	2110			
M'Leay River	466			
Monaroo	1916			
Moreton Bay	268			
Murrumbidgee	2592			
New England	2231			
Wellington	1199			
Total	15651	9980	2968	—

170 POPULATION BY SEX AND AGE IN NEW SOUTH WALES—1846.

Convicts free by servitude, absolutely and conditionally pardoned, during 1847 and 1848.

Years.	Absolutely pardoned.			Conditionally pardoned.			Free by servitude.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1847	2	0	2	1,020	33	1,053	588	215	803
1848	6	1	7	2,226	66	2,292	275	77	352
Total.	8	1	9	3,246	99	3,345	863	292	1155

On the 2nd March, 1846, the total bond, or convict, population in the colony, was 10,565. During 1847 and 1848 there were freed 4,509, or more than 2,250 per annum. Allowing 2,000 for the number liberated during ten months of 1846, the total libera-

tions to the end of 1848 would be about 6,500, which, at that period, would leave 4,000 still in bond—a number that would be nearly obliterated in the years 1849 and 1850—when the whole population of the province would be free.

Number of Persons of each Sex and Age, in the Counties in the Sydney or Middle District, and in the Commissioners' Districts beyond the limits of Location, in 1846.

Counties.	Males.					Females.					Totals.		General Total.
	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Males.	Females.	
Argyle	621	251	159	1587	421	620	220	153	755	124	3039	1872	4911
Bathurst	480	224	142	1624	329	516	211	128	655	82	2799	1592	4391
Bligh	59	22	9	295	35	54	23	13	81	7	420	178	598
Brisbane	169	46	30	595	96	175	49	27	203	16	936	470	1406
Camden	1088	585	356	2181	742	1103	506	312	1200	250	4952	3371	8323
Cook	413	272	168	868	401	454	271	147	468	136	2122	1476	3598
Cumberland	8617	4744	3135	18096	5650	8599	4717	3975	13430	2575	40242	33296	73538
Durham	1045	472	307	2157	489	1124	417	223	1148	172	4470	3084	7554
Georgiana	98	59	31	358	91	111	43	25	118	19	637	316	953
Gloucester	324	169	118	744	137	300	140	94	315	58	1492	907	2399
Hunter	143	84	64	267	137	163	94	45	156	37	695	495	1190
King	206	95	67	547	152	206	76	53	233	30	1067	598	1665
Macquarie	197	84	58	700	288	229	87	52	243	15	1327	646	1973
Murray	337	132	112	985	237	286	134	63	376	59	1803	918	2721
Northumberland	1719	881	509	3726	915	1761	862	517	2113	332	7750	5385	13335
Phillip	71	28	15	265	53	77	22	17	87	6	432	209	641
Roxburgh	294	127	72	789	222	262	119	93	319	56	1504	849	2353
St. Vincent	226	116	78	695	193	259	114	67	293	61	1308	794	2102
Wellington	91	26	17	469	108	86	26	18	111	18	711	259	970
Westmoreland	199	112	58	511	115	200	87	35	219	39	995	580	1575
Stanley, Moreton Bay	167	70	36	755	94	151	53	27	230	16	1122	477	1599
Auckland, Twofold Bay	143	49	34	446	81	97	43	18	130	47	753	335	1088
Total	16707	8648	5575	38660	10986	16833	8314	6102	22883	4175	80576	58307	138885
Commissioners' Districts, beyond the Limits of Location.													
Bligh	56	23	14	458	64	63	25	6	71	8	615	173	788
Clarence River	118	47	34	598	72	114	40	29	167	6	869	356	1225
Darling Downs	32	8	19	436	57	38	6	13	44	5	552	106	658
Lachlan	235	107	77	983	167	222	77	45	261	24	1569	629	2198
Liverpool Plains	117	55	77	1358	171	115	28	21	158	10	1778	332	2110
M'Leay River	37	10	21	225	47	41	13	11	60	1	340	126	466
Menaroo	222	82	93	765	159	202	78	44	233	38	1321	595	1916
Moreton Bay	11	2	6	191	14	17	1	1	25	—	224	44	268
Murrumbidgee	266	110	78	1175	181	250	90	69	335	28	1820	772	2592
New England	163	86	70	1273	164	152	55	37	216	15	1756	475	2231
Wellington	103	30	22	689	125	87	25	8	108	2	969	230	1199
Total	1370	560	511	8151	1221	1301	438	284	1678	137	11813	3838	15651
Total Population of Middle District.	18077	9208	6386	46811	9572	18134	8752	6386	24561	4312	92389	62145	154534

MARRIED AND SINGLE IN NEW SOUTH WALES IN 1846.

Number of Married and Single Persons of each Sex in the Counties in the Sydney or Middle District, and in the Commissioners' Districts beyond the limits of Location in 1846 :—

Counties.	Males.		Females.		Totals.		General Total
	Married.	Single.	Married.	Single.	Males.	Females.	
Argyle	823	2,216	822	1,050	3,039	1,872	4,911
Bathurst	648	2,151	674	918	2,799	1,592	4,391
Bligh	86	334	86	92	420	178	598
Brisbane	218	718	217	253	936	470	1,406
Camden	1,424	3,528	1,369	2,002	4,952	3,371	8,323
Cook	555	1,567	530	946	2,122	1,476	3,598
Cumberland	13,090	27,152	13,319	19,977	40,242	33,296	73,538
Durham	1,260	3,210	1,256	1,828	4,470	3,084	7,554
Georgiana	124	513	130	186	637	316	953
Gloucester	370	1,122	352	555	1,492	907	2,399
Hunter	179	516	190	305	695	495	1,190
King	267	800	258	340	1,067	598	1,665
Macquarie	314	1,013	251	395	1,327	646	1,973
Murray	409	1,394	403	515	1,803	918	2,721
Northumberland	2,330	5,420	2,271	3,314	7,750	5,585	13,335
Phillip	96	336	93	116	432	209	641
Roxburgh	359	1,145	352	497	1,504	849	2,353
St. Vincent	348	960	336	458	1,308	794	2,102
Wellington	134	577	132	127	711	259	970
Westmoreland	249	746	248	332	995	580	1,575
Stanley (Moreton Bay)	251	871	237	240	1,122	477	1,599
Auckland (Twofold Bay)	185	568	173	162	753	335	1,088
Total	23,719	56,857	23,699	34,608	80,576	58,307	138,883
Commissioners' Districts beyond the limits of Location.							
Bligh	84	531	78	95	615	173	788
Clarence River	188	681	169	187	869	356	1,225
Darling Downs	68	484	55	51	552	106	658
Lachlan	309	1,260	292	337	1,569	629	2,198
Liverpool Plains	184	1,594	170	162	1,778	332	2,110
M-Leay River	67	273	61	65	340	126	466
Menaroo	250	1,071	259	336	1,321	595	1,916
Moreton Bay	21	203	23	21	224	44	268
Murrumbidgee	334	1,486	342	430	1,820	772	2,592
New England	226	1,530	223	252	1,756	475	2,231
Wellington	123	846	113	117	969	230	1,199
Total	1,544	9,959	1,785	2,053	11,813	3,838	15,651
Total Population of Middle District	25,573	66,816	25,484	36,661	92,389	62,145	154,534

Number of Married and Unmarried Persons in the City of Sydney and its Suburbs.

Name of City and Suburb.	County in which situated.	Males.		Females.		Totals.		General Total.
		Married.	Single.	Married.	Single.	Males.	Females.	
City of Sydney	Cumberland	7,072	13,738	7,208	10,340	20,810	17,548	38,358
Balmain*	Ditto	247	435	255	400	682	655	1,337
Camperdown*	Ditto	50	75	52	64	125	116	241
Canterbury*	Ditto	43	85	43	47	128	90	218
Chippendale*	Ditto	85	134	88	109	219	197	416
Glebe, the*	Ditto	210	323	212	310	533	522	1,055
Newtown*	Ditto	257	374	252	332	631	584	1,215
O'Connell Town*	Ditto	8	17	8	7	25	15	40
Paddington*	Ditto	172	250	179	225	422	401	826
Redfern*	Ditto	177	260	183	245	437	428	865
St. Leonard's*†	Ditto	74	149	74	115	223	189	412
Surry Hills*	Ditto	33	88	33	53	121	86	207
Total		8,428	15,928	8,587	12,247	24,356	20,834	45,190

Note.—The mark (*) attached to the name of any suburb indicates that it is situated on private property. This mark (†) includes the inhabitants of the Government Township of St. Leonard's, as well as the residents on the adjoining suburbs.

POPULATION OF EACH TOWN OR VILLAGE IN 1846.

Number of Married and Unmarried Persons in the several Towns and Villages in New South Wales.

Name of Town or Village.	County in which situated.	Males.		Females.		Totals.		General Total.
		Married.	Single.	Married.	Single.	Males.	Females.	
Ailsa	Bligh	3	2	4	4	5	8	13
Albury	Unnamed	11	32	11	11	43	22	65
Appin	Cumberland	20	47	19	39	67	58	125
Bathurst	Bathurst	303	800	320	460	1,103	780	1,883
Berrima	Camden	79	178	54	66	257	120	377
Boyd*	Auckland	27	65	23	10	92	33	125
Braidwood	St. Vincent	40	79	40	47	119	87	206
Brisbane, North	Stanley	109	296	101	108	405	209	614
Brisbane, South	Ditto	70	139	67	70	209	137	346
Broulee	St. Vincent	3	6	3	10	9	13	22
Bungendore	Murray	4	15	4	7	19	11	30
Bungonia	Argyle	20	33	19	26	53	45	98
Camden*	Camden	40	100	40	62	140	102	242
Campbelltown	Cumberland	91	204	89	157	295	246	641
Carcoar	Bathurst	15	28	16	14	43	30	73
Clarence Town	Durham	14	36	14	29	50	43	93
Dalkeith*	Bligh	7	26	7	9	33	16	49
Dungog	Durham	22	47	21	34	69	55	124
Eden	Auckland	10	30	10	13	40	23	63
Gosford	Northumberland	10	25	11	7	35	18	53
Goulburn	Argyle	218	468	220	265	686	485	1,171
Gundagai	Unnamed	16	39	15	17	55	32	87
Gunning	King	20	40	20	15	60	35	95
Hartley	Cook	11	20	11	20	31	31	62
Haydonton*	Brisbane	17	57	21	22	74	43	117
Ipswich	Stanley	20	44	19	20	64	39	103
Kelso*	Roxburg	85	173	85	121	258	206	464
Liverpool	Cumberland	115	247	90	149	362	239	501
Macquarie	Macquarie	144	455	79	141	599	220	819
Maitland, East	Northumberland	152	337	150	271	489	421	910
Maitland, West*	Ditto	433	917	442	617	1,350	1,059	2,409
Merriwa	Brisbane	5	24	8	5	29	13	42
Montefiores*	Bligh	25	47	28	29	72	57	129
Morpeth*	Northumberland	120	214	125	176	334	301	635
Mudgee	Wellington	22	68	22	19	90	41	131
Murrurundi	Brisbane	11	24	9	8	35	17	52
Muswellbrook	Durham	42	81	40	45	123	85	208
Narellan	Cumberland	4	4	2		8	6	14
Newcastle	Northumberland	248	769	192	262	1,017	454	1,471
Nurea	Unnamed	9	14	10	11	23	21	44
Parramatta	Cumberland	612	1,649	787	1,406	2,261	2,193	4,454
Paterson	Durham	23	51	23	44	74	67	141
Penrith*	Cumberland	56	115	52	68	171	120	291
Petersham*	Ditto	23	43	22	34	66	56	122
Picton	Camden	24	48	23	25	72	48	120
Pitt Town	Cumberland	35	74	37	83	109	120	229
Queanbeyan	Murray	40	88	35	45	128	80	208
Raymond Terrace	Gloucester	45	100	44	74	145	118	263
Richmond	Cumberland	122	277	128	219	399	347	746
Scone	Brisbane	22	47	21	27	69	48	117
Singleton*	Northumberland	109	200	116	140	309	256	565
St. Alban's	Ditto	4	4	4	9	8	13	21
St. Aubin's*	Brisbane	27	30	22	24	57	46	103
Stockton*	Gloucester	18	48	18	28	66	46	112
Windsor	Cumberland	248	682	268	481	930	749	1,679
Wollombi	Northumberland	16	25	15	20	41	235	76
Wollongong	Camden	86	201	90	138	287	228	515
Yass	Murray and King	46	124	50	54	170	104	274
Total Population in Country Towns		4,171	10,036	4,216	6,319	14,207	10,535	24,742
Add City of Sydney and Suburbs		8,118	15,928	8,587	12,247	24,356	20,834	45,190
Total Urban Pop. in N. S. Wales		12,599	25,964	12,803	18,566	38,563	31,369	69,932

Note.—This mark (*) attached to the name of any suburb, town, or village, indicates that it is situated on private property

BIRTHS, DEATHS, AND MARRIAGES IN NEW SOUTH WALES. 173

Statement, showing the Increase of the Population by Births and Immigration respectively, in each year, from 1839 to 1848.

Years.	Gross Increase.		Total.	Gross Decrease.		Net Increase.	Population.
	Births.	Immigration.		Deaths.	Departures.		
1836	—	—	—	—	—	—	77,096
1837	2,270	7,700	9,970	1,799	—	8,171	85,267
1838	2,836	11,913	14,749	2,104	—	12,645	97,912
1839	3,304	15,651	18,955	2,481	—	16,474	114,386
1840	4,233	13,226	17,459	2,382	—	15,077	129,463
1841	5,204	19,938	25,142	2,894	2,998	19,250	149,669
1842	6,333	11,649	17,982	2,717	5,045	10,220	159,889
1843	7,182	5,493	12,675	2,293	4,730	5,652	165,541
1844	7,946	8,809	16,755	2,122	5,054	9,581	173,377
1845	8,522	5,968	14,490	2,128	4,183	8,179	181,556
1846	7,061	6,673	13,734	2,125	4,514	6,339	196,704
1847	8,881	6,563	15,444	2,688	4,474	8,282	204,986
1848	8,746	13,977	22,723	2,574	4,751	7,235	205,009
1849							
1850							

Marrriages, Births, and Deaths, in New South Wale, since 1832.

Years.	Marriages.	Births.		Deaths.		Total.	
		Males.	Fem.	Males.	Fem.		
1832	619	655	599	1,254	650	275	880
1833	698	769	791	1,560	850	345	1,150
1834	750	927	930	1,857	827	337	1,164
1835	744	931	872	1,830	990	463	1,453
1836	774	1,047	1,073	2,120	1,131	497	1,628
1837	916	1,159	1,111	2,270	1,217	582	1,799
1838	970	1,450	1,386	2,836	1,392	712	2,144
1839	1,157	1,678	1,626	3,304	1,609	872	2,481
1840	1,631	2,119	2,114	4,233	1,517	865	2,382
1841	1,924	2,631	2,573	5,204	1,750	1,144	2,894
1842	2,564	3,160	3,173	6,333	1,753	964	2,717
1843	1,831	3,689	3,493	7,182	1,446	847	2,293
1844	1,813	3,999	3,947	7,946	1,362	760	2,122
1845	1,837	4,338	4,184	8,522	1,245	883	2,128
1846	1,796	3,529	3,532	7,061	1,321	804	2,125
1847	1,852	4,536	4,345	8,881	1,646	1,042	2,688
1848	1,801	4,484	4,262	8,746	1,584	990	2,574
1849							
1850							
Total.	23,677	41,101	40,011	81,139	22,290	12,382	34,622

By the joint census of 1846, the population of N. S. Wales and of Port Phillip, was as follows: [Census of 1851 in Supplement.]

	Males.	Females.	Total.
<i>Within</i> limits of Location—			
Middle District	80,576	58,307	138,883
Port Phillip District	13,234	10,234	23,468
<i>Beyond</i> limits of Location—			
Middle District	11,813	3,838	15,651
Port Phillip District	6,950	2,461	9,411
Crews of colonial vessels	2,196	—	2,196
Total	114,769	78,840	189,609
Population of 1841	87,298	43,558	130,856
Increase	27,471	31,282	58,573
Centesimal increase during } the same period	31.46	71.81	44.89
Average annual centesimal in- } crease for same period	6.29	14.36	8.98
Centesimal proportion of 1846 } the sexes (1841	60.53	39.47	100
	66.71	33.29	100

From the 1st January to 31st December, 1848, the two districts of New South Wales and Port Phillip presented the following results:—

	Male.	Female.	Total.
Increase by—			
Immigration	8,452	5,525	13,977
Births	4,484	4,262	8,746
Total increase	12,936	9,787	22,723
Decrease by—			
Deaths	1,584	990	2,574
Departures	3,534	1,217	4,751
Total decrease	5,118	2,207	7,325
Summary—			
Total increase	12,936	9,787	22,723
Total decrease	5,118	2,207	7,325
Net increase	7,818	7,580	15,398
Population, Dec. 31, 1847	123,890	81,119	205,009
„ Dec. 31, 1848	131,708	88,699	220,407

According to the census of 1846, the classification of occupations showed—commerce, trade, and manufactures, 9,264; agriculturists, 13,952; grazing shepherds, 13,565; stockmen, &c., 5,532; horticulture, 943; other labourers, 12,104; mechanics and artizans, 10,769; domestic servants, males, 4,181, females, 6,455; clerical profession, 185; legal, &c., 271; medical, 343; other educated persons, 1,737; alms-people, pensioners, paupers, &c., 1,687; all other occupations, 7,816; residue of population, 98,602 = 187,413.

The places where born were thus noted:—
In the colony, males, 27,361; females, 27,492:

England, males, 33,756; females, 13,493: Wales, males, 364; females, 177: Ireland, males, 22,445; females, 15,976: Scotland, males, 6,409; females, 3,970: other British dominions, males, 1,153; females, 752: foreign countries, males, 901; females, 285.

The dwellings of the inhabitants were thus classified in 1846:—Houses of stone or brick, 9,955; wood, 16,511; shingled, 17,012; slated, 500. Total, 26,563. Inhabited, 24,848. Of the latter, the county of Cumberland, containing Sydney, has 12,939 houses.

RELIGION.—According to the census of 1836, there were—of Protestants, 77,096; of Roman Catholics, 21,898; Jews, 477. Judge Burton states, that in 1836, among the convicts, 18,500 were Protestants, 9,000 Roman Catholics, and 331 Jews. In 1846,

the religious denominations of the inhabitants of New South Wales, alone, was:—Church of England, 79,801; Church of Scotland, 16,053; Wesleyans, 6,338; other Protestants, 3,681; Roman Catholics, 47,187; Jews, 969; Mahomedans and Pagans, 135; other persons, 361. For the year ending 31st December, 1848, there were:—

Religious Denominations.	Births.	Marriages.	Deaths.
Church of England	3,790	720	1,405
Church of Scotland	930	504	225
Wesleyan Methodists	483	77	81
Independents	85	27	29
Baptists	32	5	8
Roman Catholics	3,387	462	812
Jews	39	6	14
Totals	8,746	1,801	2,574

Persons of each of the under-mentioned Religious Denominations, on 2nd March, 1846.

Counties.	Church of England.	Church of Scotland.	Wesleyan Methodists.	Other Protestants.	Roman Catholics.	Jews.	Mahomedans and Pagans.	Other Persuasions.	General Total.
Argyle	2,334	622	64	26	1,797	59	2	7	4,911
Bathurst	2,013	466	380	40	1,464	23	4	1	4,391
Bligh	297	48	—	7	245	—	—	1	598
Brisbane	792	170	8	7	426	1	2	—	1,406
Camden	4,250	1,007	321	62	2,629	24	19	11	8,323
Cook	2,074	272	183	10	1,036	12	6	5	3,598
Cumberland	38,344	6,458	3,696	2,857	21,216	688	32	247	73,538
Durham	3,867	1,417	313	76	1,862	10	2	7	7,554
Georgiana	448	136	5	3	361	—	—	—	953
Gloucester	1,396	387	99	14	500	1	2	—	2,399
Hunter	783	64	40	1	299	2	—	1	1,190
King	821	89	10	14	730	1	—	—	1,665
Macquarie	1,136	222	43	27	519	20	3	3	1,973
Murray	1,290	328	4	26	1,043	24	4	2	2,721
Northumberland	6,849	1,301	817	152	4,117	53	8	38	13,335
Phillip	356	88	2	—	191	1	3	—	641
Roxburgh	1,231	311	64	28	717	1	1	—	2,353
St. Vincent	943	377	5	6	766	3	1	1	2,102
Wellington	590	61	9	4	305	—	—	1	970
Westmoreland	619	144	136	3	672	1	—	—	1,575
Stanley, Moreton Bay	770	209	24	57	497	9	22	11	1,599
Auckland, Twofold Bay	577	152	6	19	328	5	—	1	1,088
Total	71,780	14,329	6,229	3,439	41,720	938	111	337	138,883
Commissioners' Districts beyond the Limits of Location.									
Bligh	368	165	6	1	243	1	2	2	788
Clarence River	760	119	15	15	300	2	12	2	1,225
Darling Downs	341	128	—	2	178	1	6	2	658
Lachlan	956	190	14	21	1,010	6	1	—	2,198
Liverpool Plains	1,175	188	10	106	625	2	—	4	2,110
M'Leay River	303	26	2	1	127	1	—	6	466
Monaroo	899	194	10	15	784	13	—	1	1,916
Moreton Bay	111	58	2	2	95	—	—	—	268
Murrumbidgee	1,401	218	29	46	893	3	—	2	2,592
New England	1,147	326	17	30	703	—	3	5	2,231
Wellington	569	112	4	3	509	2	—	—	1,199
Total	8,030	1,724	109	242	5,467	31	24	24	15,651
Total Pop. of New South Wales	79,810	16,053	6,338	3,681	47,187	969	135	361	154,534

The ecclesiastical establishment for 1848 was: *Church of England*—Diocese of Sydney, forty-two rectors or ministers, with salaries averaging £200 per annum, and, in almost every instance, a parsonage (or an allowance of £50 a-year), and also a glebe of forty acres.

Diocese of Newcastle.—Sixteen rectors or ministers, with salaries and allowances as in the Sydney diocese. There are two ministers beyond the settled districts, with £200 a-year each.

Church of Scotland.—Seventeen ministers, with salaries averaging £150 a-year each, and, in several instances, a house and glebe.

Wesleyan.—Nine ministers, with each £150 or £200 a-year, and a house. No glebe.

Independent.—Five ministers; salary, £170 to £250; in one instance a house and glebe.

Baptist.—One minister; salary, £250.

Church of Rome.—Twenty-five ministers of religion, with salaries averaging £200 a-year, and, in some instances, a house, but no glebes.

Jews.—One minister; salary, £100 per annum.

There are now nine Episcopalian Lutheran churches in and near Sydney, two Presbyterian, one Free Church, one Wesleyan, one Baptist, one Congregational, one Friends (Quakers), one Bethel Mariners, four Roman Catholic chapels, and one Jewish synagogue. There are ministers of the Established Church at Paramatta, Hunter's hill, Prospect, Liverpool, Marsfield, Campbelltown, Narellan and Cabramatta, Camden, Mulgoa, Windsor, Richmond, Pitt Town and Wilberforce, Penrith, Castlereagh, Berrima, Hawkesbury, Goulbourn, Yass, Braidwood, Bathurst, Illawarra, Newcastle, Maitland, Port Macquarie, Wellington, Seaham, Marengo, New England, and sixteen other places.

Expense of Ecclesiastical Establishment in 1848.

Denominations.	Paid from Colonial Treasury.		Paid from Military Chest for Convict Service.	Total.
	Salaries.	Churches etc.		
Church of England	£ 15,204	£ 3,726	£ 655	£ 19,585
Presbyterian . . .	2,614	400	25	3,039
Wesleyan	862			862
Roman Catholics . .	6,670	3,288	66	10,124
Grand Total	25,952	7,514	746	33,610

then, under twenty-one years of age, who could not read, males, 18,568; females, 18,035: read only, males, 5,480; females, 6,159: read and write, males, 9,323; females, 9,078. Above twenty-one years of age, cannot read, males, 14,245; females, 7,160; read only, males, 7,150; females, 6,209; read and write, males, 37,623; females, 15,504.

Public or Free Schools in 1848.

Denomination.	Number of Schools.	Scholars.		
		Male.	Female.	Total.
Church of England—				
* Orphan Schools . . .	2	96	110	206
* Schools established prior to 1837	32	1,566	1,259	2,825
† Ditto according to regulation of 1841	35	1,462	1,230	2,672
† Presbyterian	43	1,471	1,134	2,605
† Wesleyan	16	196	527	723
Roman Catholic—				
* Orphan Institution . .	1	61	73	134
* Schools prior to 1847 . .	11	541	550	1,091
† According to regulation of Sept. 1841	21	917	792	1,709
Totals	161	6,310	5,675	11,965

Note.—The Schools marked thus (*) are supported by Government, and those marked thus (†) by Government and Voluntary Contributions.

There is a Sydney College with eighty students; a grammar school with forty-two scholars, and a "King's school," Paramatta, with thirty-six scholars. Of private schools, there are in Sydney district 223, with 3,510 males and 3,208 female scholars=6,718.

The total sums paid from the Colonial treasury in 1848, for education in New South Wales (including the Port Phillip district), was £13,540.

THE PRESS.—About twelve newspapers and periodicals. These publications are well conducted, and exhibit a liberal spirit and talent equal to the provincial press of any portion of the United Kingdom. The *Sydney Herald, Chronicle, Colonist, and Gazette*, are published three times a-week; the *Monitor*, six times a week; the *Commercial Journal*, twice, and the government *Gazette*, once a-week. There is an excellent subscription library and reading-room, at Sydney; an Australian museum and botanic garden, a Floral and Horticultural Society, and a Mechanics' School of Arts. There are agricultural societies in different parts of the colony; also reading-rooms and libraries; and in no part of the British Empire is there a greater desire for the extension of education, and the acquiring of useful information [Further details in Supplement.

EDUCATION is in progress, and much needed. According to the census of 1846, there were

CRIME.—In the section on transportation I have adverted to the fearful neglect of the home and local government, from 1788 to 1836, of the spiritual wants of the many thousand criminals deported during that period from the United Kingdom to Australia. At New South Wales, at Van Diemen's Land, and at Norfolk Island, crime had reached its highest pitch about the years 1835-6. Extreme severity towards the prisoners, a neglect of the ordinances of religion, the flooding of the colony with criminals, without a due admixture of a free and untainted population, and the absence of any other mode of punishment in New South Wales for felons convicted there, except by deporting them to an earthly pandemonium at Norfolk Island, had produced a dreadful amount of sin in New South Wales. The Rev. Mr. M'Encroe, who attended seventy-four executions in New South Wales in four years, stated, that the greater number of the criminals, on their way to the scaffold, "thanked God that they were not going to Norfolk Island." Several of the prisoners there committed suicide, rather than live among the demons in human form by whom they were surrounded.

All this, however, distressing as it is, and disgraceful, in the highest degree, to those who, directly or indirectly, sanctioned the

continuance of such a barbarous system, appears to me no just argument against penal settlements, provided always they be judiciously regulated. To condemn "transportation" as a secondary punishment, because of the neglect of the positive and responsible duties of government towards a penal colony for forty years, is unreasonable; and if space be afforded me, at the close of this work, a chapter will be devoted to the examination of this important subject—important on many accounts—from the abolition of capital punishments for every offence, except murder; and by reason of the heavy expense attendant on the maintenance of a large prison population at home; the competition of their forced labour with that of the free and struggling citizens; the difficulty of accomplishing a prison reformation; and the almost utter impossibility of a man tainted with crime, and known to have been in a prison, being enabled to gain an honest livelihood in England. For the present, my duty consists in ascertaining the existing state of crime in New South Wales, and how far it has diminished of late years. The following statement extends over a period of twenty years; at the commencement of the period, the population was about 36,000; at its termination, about 200,000:—

Number of Convictions in the Supreme Court and Courts of Quarter Sessions, and the Number of Executions.
[The continuation of this table since 1848 will be found in the Supplement.]

Year.	Supreme Court.		Quarter Sessions.		Criminals Executed.				Total.
	Felonies.	Misdemeanors	Felonies.	Misdemeanors	Protestants.		Roman Catholics.		
					Free.	Bond.	Free.	Bond.	
1829	244	29	—	—	4	24	6	18	52
1830	269	6	—	—	6	16	7	20	49
1831	205	29	—	—	3	10	3	16	32
1832	225	2	—	—	1	1	1	9	12
1833	219	11	—	—	1	9	6	15	31
1834	272	11	—	—	—	22	—	20	42
1835	256	1	—	—	2	15	4	18	39
1836	168	4	—	—	2	14	3	7	26
1837	177	12	—	—	1	4	5	2	12
1838	199	18	—	—	2	6	1	10	19
1839	159	12	609	132	3	8	—	11	22
1840	99	9	565	161	1	6	—	1	8
1841	159	20	468	106	2	8	3	2	15
1842	135	41	536	85	3	2	2	3	10
1843	146	34	418	48	1	3	—	2	6
1844	199	22	331	48	1	7	—	—	8
1845	198	15	303	51	—	1	2	—	3
1846	180	11	350	77	—	—	1	—	1
1847	176	10	281	61	—	—	3	1	4
1848	189	68	269	45	4	—	5	—	9
Total .	3 864	365	4,130	814	37	156	52	155	400

Note.—The Quarter Sessions returns from 1829 to 1833, both inclusive, not rendered, or inaccurate.—Of the criminals executed, there were in the years 1830, one pagan; 1834, two faith uncertain; 1835, one pagan; 1841, two aborigines; 1842, one Jew and two aborigines; 1843, three aborigines; 1847 three aborigines

Notwithstanding the five-fold increase of population, and the large mass of criminals poured into the colony from 1829 to 1840, the diminution of crime is very remarkable. In 1839, the convicted felonies amounted to 768; ten years after, in 1848, they were only 458. In 1829, capital punishment was inflicted in fifty-two instances; twenty years after (1848) there were only nine. During the first ten years of the period under review, the number of executions amounted to 276; during the ensuing ten years, they were no more than ninety-seven. There is a singular fact connected with this record of capital punishments, which I have carefully collated from the annual returns in the "Blue Books" transmitted by the governor to her Majesty's secretary of state for the colonies, and that is, the number of protestants—compared with Roman catholics—who have perished by the law for their crimes, viz., 193 to 207; the proportion of the free to the bond, was 89 to 311.

The offenders convicted in the supreme court of New South Wales during 1848, were—

Offences.	Sydney.	Circuit.	Melbourne.
FELONIES:—			
Murder	3	2	1
Manslaughter	2	3	2
Shooting at, &c.	1	—	6
Robbery	—	—	8
" with violence	1	6	—
Rape	2	4	—
Abduction	1	—	—
Burglary, &c.	2	1	2
Housebreaking	1	—	1
Receiving stolen goods	2	—	—
Stealing in a dwelling-house	—	3	5
Larceny	4	3	5
Forgery and Uttering	8	8	13
Piracy	6	—	—
Horsestealing	8	10	9
Sheep-stealing	—	1	—
Cattle-stealing	—	8	—
Other Offences	—	1	—
Total Felonies	41	50	52
MISDEMEANOURS:—			
Assaults	5	6	10
Riot and Assault	—	—	15
Subornation of Perjury	1	—	—
Bribery	—	—	1
Conspiracy	23	—	—
Fraudulent Insolvency	2	—	—
Obtaining Money under } False Pretences	1	1	1
Uttering Base Coin	—	—	—
Neglect escape	—	—	1
Total Misdemeanours	32	7	28
Total Capital Convictions	2	3	1

DIV. I.

The executions for the undermentioned offences during the year 1848, were—

Religion.	Murder.	Rape.
Protestants, free	2	2
Roman Catholics, free	1	—
Total	3	2

On comparing this return with the parliamentary paper, No. 410, laid before the House of Commons 21st May, 1838, I find that the criminal convictions before the supreme court, during the year 1835, amounted to 685, of whom 19 were for murder; 17 for attempting ditto; 1 for manslaughter; 13 for rape; 2 arson; 15 forgery; 82 bushranging, highway robbery, &c.; 67 cattle, horse, and sheep-stealing; 15 burglary; 3 perjury; 347 larceny, receiving known stolen property, &c.; and 87 for misdemeanours and assault. The total numbers committed for trial during the year 1835, (the last year given in the return), was 959 males, and 123 females, of whom 685 were convicted, 309 acquitted, 53 not prosecuted, and 35 admitted to bail; 86 received sentence of death, 368 transportation, and 162 were sent to hard labour, &c. A comparison of this return with that of 1848, must certainly be a matter of satisfaction to the colonists of New South Wales.

The convictions at the courts of Quarter Sessions in Sydney, Paramatta, Goulbourn, Bathurst, and Maitland, during the year 1848, were—

Felonies.—Burglary, 4; housebreaking, 7; stealing in a dwelling-house, 8; highway robbery, 1; robbery, 10; ditto, armed, 1; stealing from the person, 26; assault with intent to rob, 9; larceny, 156; receiving stolen property, 3; embezzlement, 1; abduction, 1; horse-stealing 7; cattle-stealing, 3; malicious wounding cattle, 1; suffering to escape, 1. Total, 269: viz.—Sydney, 150; Paramatta, 44; Goulbourn, 10; Bathurst, 15; Maitland, 50.

Misdemeanours.—Assaults with various intents, 25; assault and false imprisonment, 1; attempting to commit felony, 3; obtaining money or goods by false pretences, 5; uttering counterfeit coin, 3; having ditto in possession, 1; attempting to dissuade a witness from giving evidence, 1; keeping a common gaming-house, 1; rescuing cattle, &c., 4; being an incorrigible rogue, 1. Total, 45: viz.—Sydney, 28; Paramatta, 6; Goulbourn, 3; Bathurst, 1; Maitland, 7.

The returns for the Gaols and House of Correction, New South Wales, for the year 1848, are as follows: [For the year 1851, see Supplement.]

Gaols.	Total Admissions of Whites, in 1848.		Total.	Felons.				Misdemeanours.			
				Tried.		Untried.		Tried.		Untried.	
	Males.	Fem.		Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.
Sydney	1,217	348	1,565	111	13	16	2	50	33	18	4
Paramatta	162	96	258	22	4	5	5	11	7	1	2
Goulbourn	34	5	39	10	—	4	—	8	—	—	—
Bathurst	67	35	102	17	3	1	—	3	3	—	—
Newcastle	—	—	—	3	—	10	2	17	2	—	—
Port Phillip	—	—	—	39	1	4	1	45	11	—	—
Total	1,480	484	1,964	202	17	40	10	114	56	19	6

Note.—The return of felons is at Michaelmas, 1848. The admissions into Newcastle and Port Phillip gaols not stated.

The prisons are under the jurisdiction of the sheriff of the colony, and the superintendence of a stipendiary visiting magistrate and principal gaoler. Any of the magistrates may visit the gaol.

In the Sydney gaol there are 108 sleeping cells, and twenty-two solitary cells, none of which are dark or below ground. The classification directed by the gaol regulations has been observed. The chaplains of the church of England and of the church of Rome, appointed by the governor, perform divine service twice on Sundays, and once during the week. They also frequently visit and instruct the prisoners. Bibles, and other religious books are supplied. Dissenting ministers are admitted on the same terms as the ministers of the church of England and of Rome. Attached to the prison are two hospitals—one for male, and the other for female prisoners, who are under the care of the surgeon of the prison. The female prisoners are attended exclusively by female officers. The protestants and Roman catholics are continually kept apart. There is also a separation of hardened offenders from those imprisoned for the first time; also of the old from the young. The felon prisoners are kept at hard work, such as breaking or cutting stone. Whipping, or solitary confinement, is resorted to for breaches of gaol regulations: irons only in cases of urgent and absolute necessity. The other colonial gaols are similarly managed; and they will all bear a comparison with those of the United Kingdom.

To a great extent the colony is now purified from crime; and it appears by the documents laid before parliament, Jan. 31, 1850, that the colonists have declared, in a petition to the Queen, that "it is their duty and determination, by every legal and constitutional means, to oppose the revival of transportation."

The civil causes tried in the supreme court of New South Wales, during 1848, were—

Name.	Juries of Four.		Juries of Twelve.		Total.
	De-fended.	Unde-fended.	Com-mon.	Special.	
Sydney	82	20	2	7	111
Circuit	13	2	—	1	16
Port Phillip	20	7	2	12	41
Total	115	29	4	20	168

There are just grounds for stating that New South Wales is more free from crime than could have possibly been expected by the most ardent philanthropist. It can be compared with several portions of the United Kingdom. It may not be irrelevant to quote in this place an unimpeachable testimony in behalf of a large portion of the present population of the colony, which reflects great credit upon them, and fully confirms the opinions which I expressed in my *History of the Colonies*, in 1834–5.

Mr. T. H. Braim, formerly of St. John's College, Cambridge, and now head principal of Sydney College, N.S.W., in his interesting *History of New South Wales to 1844*, thus speaks of the Australian youth:—

"Descended, as many of them have been, from parents whose names were stained by crimes against their country and their God; brought up under a fearfully imperfect mental training, a neglected moral cultivation, and either an entire omission, or at the best but an imperfect performance of the duties and ordinances of religion, they have yet risen superior to these disadvantages, have earned for themselves a good name, have reared families in honour and respectability, and are now themselves in the enjoyment of general esteem and confidence, and their children availing themselves of blessings placed within their reach, which their fathers knew not, are bearing upon them the buds of excellence."

Of the emancipists, he says:—

"They form no uninteresting part of the population; feeling that they had a bad character to lose and

a good one to gain, they have in many instances set themselves about the work of reformation; some of them are reckoned among our most honourable tradesmen and merchants, among the most liberal supporters, too, of the various benevolent institutions which adorn our land (Australia). Some of these institutions have been all but entirely founded, and are now mainly supported by their means. In many cases they have, by their industry and perseverance, acquired considerable wealth; and in most instances the wealth thus obtained has been generously and honourably devoted to the public benefit, the real and substantial advancement of this land of their expatriation. Nor do we know a more pleasing trait in human character than that which is thus displayed; once degraded, they have paid to a violated law the satisfaction it imperatively demanded; but when the debt was paid another obligation was felt to remain behind. Society had lost that beneficial influence which each member is called upon to exercise, and to

atone for this was now their honourable desire. In the fair and honest pursuit of commerce, by untiring industry, they acquired those means which enabled them to gratify their wish—a competence—more, a profession—rewarded their patient toil; and no sooner was this poured into their lap, than they gave it back, spreading it through numerous channels, through each of which, as it flowed, it left blessings that even succeeding ages may enjoy. To say nothing of many public buildings, which are the chief architectural embellishments of our city, and which have been the result of their enterprise and zeal, we turn to some of those institutions of charity and benevolence which own them as their earliest supporters.”—[Vol. ii., pp. 315–16.]

A people of whom thus much can be truly said, are they not qualified for the enjoyment of free institutions?

CHAPTER IV.

EARLY AGRICULTURAL AND PASTORAL STATE OF NEW SOUTH WALES—STAPLE PRODUCTS, AGRICULTURE, LIVE STOCK, WOOL, TALLOW—PRICES AND WAGES—COMMERCE, IMPORTS AND EXPORTS—SHIPPING, &c.

At the period of the formation of New South Wales, or during its early struggles, when the colonists were again and again on the eve of perishing of want, how strangely the prophecy would have sounded in men's ears, could it have been foretold, that in little more than half a century, the colony would not only produce a sufficient quantity of animal and vegetable food for the support of a quarter of a million Englishmen and their descendants; but that Australia should have, in that short time, become the greatest wool-exporting country in the world; her salubrious climate, and the pasturage of her virgin soil, rendering the increase of sheep and cattle so rapid, as to induce their owners to slaughter them in great numbers, merely for the sake of the tallow thus obtained.

The present condition of New South Wales is indeed surprising, and the statements which mark the different epochs of her progress, well deserve attention in an historical point of view; and scarcely less, from the evidence they afford of the energy and industry of the Anglo-Saxon race—an energy to which difficulty appears to lend fresh vigour, and an industry as unflagging in its appointed course as that of the earth round the sun.

To me, who have had for years my mind

saturated—if I may be allowed the expression—with the one vast subject of the British colonial empire, the task of collecting and compiling its astonishing records has been truly a labour of love. I have studied the history of each colony, and have found in each a peculiar interest—an individuality, as it were—that grows upon the mind which views them as parts of a whole; different in their construction, but not incongruous; on the contrary, well calculated, by their union, to strengthen each other. In this light, which I sincerely believe to be the true one, I would fain bring them before my readers; and although deeply sensible of the magnitude of the subject, and the difficulty of the attempt, yet that appears to me as the strongest possible reason for endeavouring to afford a correct idea of the relative proportion of each possession, which can scarcely be conveyed, except by a general description of the whole. For instance, if in teaching a child the geography of England, we were to show him delineations—however accurate—of a few of the counties, and barely mention the others, would he not form a very inaccurate (if, indeed, any clear notion at all) of the country, as a whole: and so it is with our colonial empire.

This, however, is a digression; to return

to New South Wales. The public stock landed at Sydney Cove with the first British settlers, in January, 1788 (see p. 403), consisted of 1 bull, 4 cows, 1 bull calf, 1 stallion, 3 mares, and 3 colts; there were also a few sheep. These were placed on a spot at the head of Sydney Cove, which was cleared for a farm, where the seeds, plants, and fruit-trees, brought from England, Rio de Janeiro, and the Cape of Good Hope, were carefully tended, under the anxious superintendance of the governor. In May, 1788, the governor directed every person in the settlement to make a report of the live stock in his possession, which the returns stated at 1 stallion, 3 mares, 3 colts, 2 bulls, 5 cows, 29 sheep, 19 goats, 49 hogs, 25 pigs, 5 rabbits, 18 turkeys, 29 geese, 35 ducks, 142 fowls, and 87 chickens. Scarcely a greater calamity could have befallen the colonists, than the destruction, at this period, by native dogs, of five ewes and a lamb. Added to this, several sheep died, in consequence of feeding on grass which the newly cut trees had shaded previously from the air and sun; hence a general belief that it would not be possible to rear this description of stock. In June, 1788, the settlement sustained a severe loss, by the neglect of a convict who had charge of the cattle—two bulls and four cows strayed into the woods near Sydney, and were not recovered—the *only remaining cow* became so dangerously wild, that it was found necessary to shoot her.

In 1790, the stock sent out by his Majesty's government in the *Guardian*, consisting of 7 horses, 16 cows, 2 bulls, a number of sheep, goats, and 2 deer, were killed when the ship struck on an iceberg near the Cape of Good Hope (see page 405.) In this year the stock had been previously diminished in a wanton manner (see page 405.) In session 1791 H.M.S. *Gorgon* arrived, to the great joy of the colonists, with 1 bull calf, 16 cows (3 bulls and 7 cows died on the passage), 68 sheep, 11 hogs, 200 fruit trees, and a quantity of garden seeds. At the close of this year the public live stock in the colony amounted to 3 stallions, 1 mare, 2 colts, 16 cows, 2 calves, 1 ram, 50 ewes, 6 lambs, 1 boar, 14 sows, and 22 pigs. The ground in cultivation at the Rose Hill government farm (Paramatta) consisted of 300 acres in maize, 44 in wheat, 6 in barley, 1 in oats, 2 in potatoes, 4 in vines, 86 in garden ground, and 17 in cultivation by the New South Wales corps.

In addition to these, there were 150 acres cleared, to be sown with turnips; ninety acres were in cultivation by settlers; twenty-eight by officers, civil and military, at and about Sydney and at Paramatta; 140 acres were enclosed, and the timber cleared for cattle; making a total of 920 acres of land thinned, cleared, and cultivated. So dense, however, was the forest around Sydney and Paramatta, that any one straying a mile from the huts was almost invariably lost; and in this way many convicts and soldiers perished.

In June, 1792, the *Atlantic* storeship brought from Calcutta two bulls, a cow, twenty sheep, and twenty goats, of the Bengal breed. In the October of the same year, nearly five years after the establishment of the colony, the whole of the ground in cultivation, both on account of the crown and of individuals, was—in wheat, 208½ acres; barley, 24¼; maize, 1,186½; garden-ground, 121¼: total, 1,640¾ acres. Ground cleared of timber, 162¼ acres. The quantity of land which had passed to settlers, under the seal of the colony, amounted to 3,470 acres, of which 470 were in cultivation, and the timber cleared from 100 more, ready for the sowing of grain. The stock belonging to the public, kept at Paramatta, consisted of 3 bulls, 2 bull calves, 5 stallions, 6 mares, 105 sheep, and 43 hogs.

The governor gave to each married settler one ewe for the purpose of breeding, and to others he gave such female goats as could be spared. Land was granted, conformably to instructions from the secretary of state. Non-commissioned officers and privates of the marines, desirous of remaining in the colony, in the proportion of 150 acres to a married non-commissioned officer; 130 acres to a single ditto; 100 acres to a married private; and eighty acres to a single man; and, on receiving their discharge, clothing, provisions for one year, seed, and agricultural implements were given to each settler. Each male convict, emancipated or discharged, received, if single, thirty acres; if married, thirty acres, and ten acres for each child. The policy of the government was, to establish a chain of farms between Sydney and Paramatta, fifteen miles distant, so that the country might be opened; which was subsequently carried out by extending lines of settlement to Windsor, on the Hawkesbury river, to Richmond, on the Nepean River, and other places, where cultivable land was found.

In 1793, of the stock which had been landed in the colony, there remained but three bulls, twenty-one cows, and seven calves. During the early stages of the settlement, it was noticed as a singular fact among the live stock, that the proportion born of males to females was about three to one. This, however, did not continue; the sexes soon became equalized, and then the number of female preponderated over the male births.

In January, 1794, one small cow and a Bengal steer, weight 372 pounds, (both private property,) were killed for the use of the troops, and sold to them at eighteen pence per pound. This was but the third time that the colonists had tasted fresh beef since their arrival in 1788, viz.—once soon after their landing, and a second time when the lieutenant-governor and officers of the settlement were feasted by the captain of a Spanish ship. In March, 1794, only one serving of salt meat remained in store, and that was to be the food of half a week. After that period, says Collins, "the prospect was truly discouraging; for mere bread and water appeared to be the portion of by far the greater part of the inhabitants of these unfortunate settlements—of that part, too, whose bodily labour must be called forth to restore plenty, and attain such a state of independence on the parent country, as would render delay or accident, in the transport of supplies, a matter of much less moment to the colony than it had ever hitherto been considered." Even a shark, caught in the harbour, yielded food to several; the oil procured from the liver sold at a shilling a quart; for but "very few houses in the colony were fortunate enough to enjoy the pleasant light of a candle."

The seed-wheat was untouched, and might remain so for a fortnight; but all the animals, public and private, were threatened with destruction, to supply food for 3,000 people. On 8th March, when the doors of the provision store were closed, and the convicts had received the last allowance which remained, a ship stood in for Port Jackson, but a gale of wind split her topsail, and she was driven to sea, to the dismay of the almost famishing inhabitants: at night the wind increased; and, during the ensuing day, nothing more was seen of the stranger. On the evening of the 9th, another sail (a brig) was in sight; but a second night of sleepless anxiety was passed, and the morning of the 10th dawned tempestuously: about three

o'clock, however, the wind changed, and the ship *William*, from Cork, with a cargo of beef and pork, and the *Arthur*, a small brig from Bengal, anchored that night in Port Jackson, and the 3,000 colonists were saved from a fearful death.

The home government now became conscious of the precarious supply of food obtainable for the convicts and settlers, and several vessels were despatched in succession to the colony, laden with all sorts of provisions; the live stock, public and private, was carefully preserved, and its numbers now were—mares, 11; stallions, 9; male asses, 4; female asses, 2; bulls, 15; cows, 25; ewes, 316; rams and wethers, 210; female goats, 352; male ditto, 170; hogs, several hundred. On the 1st of July, 1795, the colony was again reduced to straits; the salt provisions were all expended but a few casks reserved for the use of the troops, and on Saturday the 11th, there was no more animal food for the convicts; a greyhound was killed and its flesh sold for that of Kangaroo; but happily on the 26th of July, H.M.S. *Providence*, captain Broughton, arrived with supplies from England, and was followed by H.M.S. *Reliance* and *Supply*. On the 1st of September, 1796, the live stock in possession of government, and of the civil and military officers of the settlement, consisted of mares and horses, 57; cows and calves, 101; bulls and bull-calves, 74; oxen, 54; sheep, 1531; goats, 1,427; hogs, 1869. The cattle which had strayed from the settlement in the year 1788, were known to be wild, and to have largely increased in a fine district now termed the Cow Pastures, to the westward of the Nepean river. The number of acres in cultivation were 5,419, and the number of persons in the colony was 3,959. It is unnecessary to follow up this narrative of the pastoral and agricultural state of New South Wales; but it offers a striking contrast when compared with the two following tables, shewing the extent of cultivation in the colony, and its progress for the past twelve years; and the number of horses, horned cattle, sheep, and swine in each colony and district on the 1st January, 1849, when it appears there were, in cultivation with wheat, 63,463 acres, yielding 638,072 bushels of grain; 26,103 acres in maize, yielding 722,704 bushels; of oats, fifty-eight bushels. Altogether, upwards of 1,500,000 bushels, or nearly 200,000 quarters of grain is raised, furnishing a quarter annually for each inhabitant.

LAND IN CULTIVATION AND PRODUCE N. S. WALES, 1837 to 1848.

There are no consecutive details concerning the grant, sale, and cultivation of land in the colony; some idea of the progress may be conveyed by the following general statement:—

Year.	Granted.	Cleared or Pastured.	Cultivated.
	Acres.	Acres.	Acres.
1810	95,637	81,937	13,700
1820	381,466	349,195	32,271
1825	673,699	127,878	45,514
1828	2,906,346	231,578	71,523
1833	4,014,117	—	—
1848	5,500,000	—	1636,69

There is less than one acre under crop to each mouth in the colony; but this yields sufficient vegetable food; for the total value of grain, flour, rice, and potatoes imported for use in 1848, was only about £35,000.

The "commissioners' districts beyond the

settled districts," to which reference is made in several tables, are those in which the squatters are located. The territory not included in the several counties is divided into districts, over each of which an officer called a commissioner of crown lands is appointed. He has under him a body of mounted constables or police, and his duty consists in preserving the peace of the district; in preventing unauthorized persons occupying the crown lands; in ascertaining that the squatters do not interfere with each other's lands; in enforcing compliance with the squatting regulations; and in making periodical returns to the government at Sydney. The terms on which the land is let to squatters are stated at pages 427 and 431. This respectable and enterprising class of settlers now occupy many of the finest districts in Australia, and possess considerable wealth.

The Quantity of Land in Cultivation, showing Crops and Produce (exclusive of Gardens and Orchards), in New South Wales, including the District of Port Phillip, from the year 1837 to 1848 inclusive.

Year.	CROPS.									Total Number of Acres in Crop.
	Wheat.	Maize	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Sown Grasses, Oats, and Barley for Hay.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1837	59,975	18,381	2,551	3,893	493	80	1,165	533	5,054	92,125
1838	48,060	25,043	2,922	3,767	429	39	1,788	925	9,939	92,912
1839	48,401	22,026	3,490	6,793	483	46	1,115	424	12,534	95,312
1840	74,133	24,966	5,144	5,453	609	115	2,594	381	12,721	126,116
1841	58,605	25,004	5,423	5,892	495	47	4,027	380	15,257	115,130
1842	65,188	27,324	5,320	4,467	486	99	5,174	224	18,592	126,874
1843	78,083	29,061	5,727	4,537	514	42	5,872	655	21,162	145,653
1844	81,903	20,798	7,236	4,336	359	43	6,783	871	21,766	144,095
1845	87,894	25,372	10,455	6,109	330	36	5,101	483	27,551	163,331
1846	88,910	31,773	9,215	9,390	177	82	5,537	228	37,221	182,533
1847	81,044	27,240	7,178	10,201	310	83	5,550	67	33,111	164,784
1848	87,219	20,375	8,789	13,572	167	14	5,774	201	27,558	163,669

Year	PRODUCE.								
	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Hay.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Cwts.	Tons.
1837	692,620	632,155	51,447	17,119	6,753	695	2,102	2,034	5,627
1838	469,140	556,268	32,103	13,416	4,878	353	3,496	4,952	6,960
1839	805,140	525,507	66,033	27,788	7,008	283	2,601	2,509	25,923
1840	1,116,814	777,947	105,389	66,020	8,863	3,338	11,050	4,300	21,329
1841	832,776	503,803	90,172	62,704	6,507	1,072	11,141	2,642	17,175
1842	854,432	590,134	88,767	84,321	4,451	1,201	12,561	2,014	18,622
1843	1,000,225	719,358	95,658	92,268	5,145	410	16,392	6,098	27,774
1844	1,312,652	575,913	132,612	70,620	4,475	511	22,748	6,382	31,848
1845	1,211,099	499,122	175,407	88,193	4,101	775	19,906	3,985	28,614
1846	1,421,750	870,400	193,835	216,783	2,250	1,929	18,329	2,087	42,754
1847	1,027,802	725,704	87,636	221,731	1,200	798	14,240	725	33,111
1848	1,528,874	262,340	145,219	116,643	2,386	158	14,954	3,059	37,795

Note.—From 1837 to 1841 the Crops and Produce of Land beyond the Boundaries of Location are not included.

CULTIVATION AND SQUATTERS IN NEW SOUTH WALES, 1848. 183

The following estimated quantity of land in cultivation in New South Wales, exclusive of gardens and orchards, on 31st December, 1839, will afford a comparison with the returns for the year 1848:—

In 1839-40, the squatting stations contained 6,666 males and 621 female Europeans, who had among them 7,088 horses, 371,699 horned cattle, and 1,334,593 sheep, and the stations were thus distributed:—

Articles.	Under Crop.	Produce.		District.	Persons occupying Stations.	Estimated Extent of Stations.		Acres in Cultivation.
	Acres.	Bushels.	Tons.			Miles.	Acres.	
Wheat	48,401	805,140	—	Port Macquarie	21	137	87,760	561
Maize	22,026	525,507	—	New England .	53	560	358,400	333
Barley	3,490	66,033	—	Liverpool Plains	111	1,157	740,480	344
Oats	6,793	27,788	—	Bligh	53	5,696	3,655,440	201
Rye	483	7,008	—	Wellington . .	77	1,265	809,600	571
Millet	46	283	—	Lachlan	95	4,193	2,683,520	2,334
Potatoes	1,115	—	2,601½	Murrumbidgee.	134	3,137	2,007,680	1,720½
Tobacco	424	—	125½	Maneroo	150	1,585	1,014,880	1,978
Sown Grasses (Hay)	12,534	—	25,923					

Quantity of Land in Cultivation in New South Wales in 1848, in Acres.

Counties. (Sydney District.)	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Pota- toes.	Tobacco	Sown Grasses.	Wheat, &c., for Hay.	Total number of Acres in Crop.
Argyle	2,406	166	474	58	1	1	177	—	77	1,567	4,927
Bathurst	2,966	134	384	—	—	—	132	—	—	1,070	4,656
Bligh	215	49	4	8	—	—	—	—	—	127	403
Brisbane	328	283	12	—	—	13	11	—	5	130	732
Camden	7,350	1,879	477	171	18	8	510	4	476	1,238	12,071
Cook	3,620	2,732	246	158	3	—	169	3	—	577	7,508
Cumberland	10,310	5,327	877	1,143	250	14	153	1	376	15,859	34,311
Durham	7,392	4,663	360	6	—	16	29	58	561	352	18,437
Georgiana	1,537	13	125	46	9	—	123	—	—	239	2,086
Gloucester	2,517	1,311	73	—	—	6	16	—	100	38	4,061
Hunter	1,079	1,429	5	13	—	—	2	—	5	22	2,555
King	1,028	119	182	12	—	—	28	—	—	229	1,598
Macquarie	261	906	19	7	—	—	7	—	—	—	1,200
Murray	1,769	234	307	157	1	—	106	—	—	1,058	3,632
Northumberland	9,344	5,207	299	64	1	—	15	72	130	684	15,816
Phillip	425	103	19	—	4	—	—	6	60	105	722
Roxburgh	1,600	60	250	—	10	—	—	150	—	500	2,570
St. Vincent	1,894	731	85	15	—	—	—	690	—	274	3,689
Stanley	—	35	—	—	—	—	—	7	—	—	42
Wellington	307	83	16	6	—	—	13	9	—	259	693
Westmoreland	1,111	150	81	36	11	4	194	—	—	200	1,787
Total in Counties	57,453	25,564	4,295	1,900	308	77	2,595	1,000	1,739	24,528	118,525
Commissioner's Dis- tricts, beyond the Limits of Location.											
Bligh	305	—	—	—	—	—	—	—	—	—	305
Clarence River	—	298	6	—	—	—	27	—	—	—	331
Darling Downs	30	120	4	6	—	—	10	—	—	10	180
Gwyder	—	—	—	—	—	—	—	—	—	—	—
Lachlan	1,297	34	25	25	2	—	11	1	—	591	2,046
Liverpool Plains	—	—	—	—	—	—	—	—	—	—	—
Lower Darling	—	—	—	—	—	—	—	—	—	—	—
McLeay River	87	314	16	2	—	—	9	—	—	12	440
Manaroo	1,258	104	70	50	—	—	113	—	—	374	1,969
Moreton Bay	22	36	—	—	—	—	—	—	—	—	58
Murrumbidgee	2,000	300	200	—	—	—	—	—	—	450	2,950
New England	830	230	120	90	—	5	40	—	—	85	1,500
Wellington	83	3	2	—	—	—	7	—	6	93	194
Total in Commis- sioners' Districts)	5,912	1,439	443	173	2	5	217	1	6	1,615	9,973

Note.—There are no returns for Gwydir, Liverpool Plains, or the Lower Darling.

184 AGRICULTURAL PRODUCE OF NEW SOUTH WALES, IN 1848.

[Note.—Later statistical returns will be found in the Supplement.]

Counties. (Sydney District.)	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Pota- toes.	Tobacco	Sown Grass Hay.	Wheat, &c., for Hay.	Area in Square Miles.
	bush 's.	bu-hels.	bushels.	bushels.	bushels.	bushels.	tons.	cwts.	tons.	tons.	
Argyle	20,297	3,389	5,441	702	6	35	368	—	66	682	1,951
Bathurst	49,488	3,777	6,490	—	—	—	454	—	—	1,590	1,860
Bligh	3,120	58	16	10	—	—	—	—	—	104	1,683
Brisbane	4,038	7,105	80	—	—	—	28	—	15	—	2,344
Camden	11,077	37,055	7,864	2,301	171	20	526	80	754	113	2,188
Cook	34,509	80,498	2,405	1,789	60	—	248	23	—	698	1,652
Cumberland	57,430	113,786	4,682	2,397	68	103	556	9	386	402	1,445
Durham	75,654	126,889	3,202	—	—	57	50	605	878	4,256	2,187
Georgiana	23,493	202	1,707	448	179	—	373	—	—	127	1,924
Gloucester	34,268	32,641	1,497	—	—	170	25	—	105	225	2,930
Hunter	7,350	45,105	100	262	—	—	6	—	3	12	2,056
King	9,682	2,284	2,078	198	—	—	38	—	—	14	1,781
Macquarie	3,437	30,595	650	30	—	—	17	—	—	215	2,000
Murray	23,196	4,904	3,935	2,606	—	—	185	—	—	626	2,248
Northumberland	83,199	152,589	4,624	338	102	285	195	3	773	729	2,342
Phillip	5,040	2,850	60	—	50	—	11	—	50	44	1,618
Roxburgh	25,000	1,500	4,000	—	300	—	60	—	—	1,000	1,519
St. Vincent	30,241	21,685	944	274	—	—	2,200	—	—	270	2,667
Stanley	—	1,010	—	—	—	—	9	—	—	—	—
Wellington	4,738	2,440	80	40	—	—	38	—	14	177	1,656
Westmoreland	16,510	2,788	8,146	691	167	33	532	—	—	178	1,592
Total in Counties	594,767	673,780	50,731	12,136	1,103	703	6,219	720	3,044	11,472	39,586
Commissioners' Dis- tricts beyond the Limits of Location.											
Bligh	7,265	—	—	—	—	—	—	—	—	—	—
Clarence River	400	10,139	—	—	—	—	138	—	—	—	—
Darling Downs	400	4,800	—	—	—	—	12	—	—	8	—
Gwydir	—	—	—	—	—	—	—	—	—	463	—
Lachlan	14,838	517	998	310	17	—	7	5	—	26	—
Liverpool Plains	—	—	—	—	—	—	—	—	—	—	—
Lower Darling	—	—	—	—	—	—	—	—	—	—	—
M'Leay River	1,575	10,245	352	—	—	—	13	—	—	—	—
Manaroo	12,550	3,220	360	400	—	—	169	—	—	2,561	—
Moreton Bay	440	6,500	—	—	—	—	—	—	—	—	—
Murrumbidgee	24,000	7,500	3,000	—	—	—	—	—	—	562	—
New England	20,750	5,750	2,850	1,500	—	75	420	—	—	90	—
Wellington	1,097	60	30	—	—	—	7	—	4	51	—
Total in Commis- sioners' Districts	83,305	48,924	7,790	2,210	17	75	766	5	4	3,761	—

Note.—There are no returns for Liverpool Plains, or the Lower Darling.

The information contained in these returns is not supposed to be accurate, and must be viewed merely as an approximation to truth. It, however, conveys some idea of the relative extent of cultivation in each county and commissioners' district. The commissioners' districts are those occupied by squatters, to whom cultivation, except for their own supply, is prohibited. The area of all the above-named counties is stated to be, in square miles, 39,586, equal to 25,374,400 acres, of which it will be seen, that no more than 118,525 acres are under cultivation.

The "Commissioners' Districts," or the squatting stations, are held for pastoral purposes; the number of squatters, and the

area held by each, in 1849, throughout the territory of New South Wales (including the Sydney and Port Phillip Districts), was—

Persons holding licences—Sydney, 1,019; Port Phillip, 666 = 1,685. Number of licenses held—Sydney, 1,520; Port Phillip, 827 = 2,347. Acres of land occupied—Sydney, 43,896,232; Port Phillip, 29,464,240 = 73,360,472; or in square miles, Sydney, 68,000; Port Phillip, 46,000 = 114,600 square miles (the area of England is about 60,000 square miles). Average quantity of land held by each individual in Sydney, 67 square miles; in Port Phillip, 69; in the whole colony, 68. Two squatters hold more than 800,000 acres each; two ditto, 600,000 each; one ditto, 450,000; two ditto, 400,000; four ditto, 350,000; three ditto, 300,000; fourteen ditto, 250,000; fourteen ditto, 200,000; thirty ditto, 150,000; seventy-three ditto, 100,000; and two hundred and ninety-eight squatters hold more than 50,000 acres each.

According to a return prepared at the office of the colonial secretary of New South Wales, dated Sydney, 1st May, 1849, the following is a statement of the number of horses, horned cattle, pigs, and sheep, in each county and district in New South Wales, on 1st January, 1849:—

It will be observed in the foregoing table that the number of sheep in the squatting districts is twice the number that are in the settled districts or counties. So also with regard to horses and horned cattle. The Murrumbidgee and the Darling Downs districts appear to be the favourite sheep pastures.

The progressive increase of live stock in New South Wales is thus shewn:—

Counties or Districts.	Horses.	Horned Cattle.	Pigs.	Sheep.
Sydney District settled				
Argyle	3,652	22,831	1,285	260,708
Bathurst	3,614	18,339	1,021	266,369
Bligh	1,015	6,561	63	119,352
Brisbane	1,795	10,153	949	132,319
Camden	5,490	33,953	6,156	38,657
Cook	2,112	8,929	4,283	13,104
Cumberland	13,294	29,710	13,728	11,265
Durham	7,014	36,977	8,085	122,588
Georgiana	2,928	24,517	936	198,325
Gloucester	1,180	21,176	2,662	3,593
Hunter	1,416	6,776	1,735	11,239
King	1,319	16,200	708	106,986
Macquarie	872	14,544	698	14,300
Murray	4,340	23,288	1,339	328,972
Northernland	5,827	34,563	10,653	21,806
Phillip	1,033	6,030	163	89,800
Roxburgh	2,420	18,250	630	188,900
St. Vincent	2,329	20,724	3,118	62,504
Stanley	446	3,947	145	23,829
Wellington	681	11,548	256	77,693
Westmoreland	2,040	13,277	924	46,994
Total	64,817	387,283	49,637	2,139,243
Commissioners' District, beyond the settled District.				
Bligh	1,313	52,940	. . .	193,221
Clarence River	1,405	48,847	867	116,767
Darling Downs	1,200	40,600	60	553,000
Gwyder	2,060	118,097	50	109,347
Lachlan	4,386	130,594	791	355,600
Liverpool Plains	3,946	130,081	. . .	341,465
Lower Darling	480	21,062	25	39,621
McLeay River	884	17,128	706	250
Maneroo	5,446	106,530	603	353,252
Moreton Bay	1,127	19,412	145	290,962
Murrumbidgee	4,586	132,301	1,200	704,165
New England	3,582	79,820	1,000	822,603
Wellington	1,683	69,385	232	277,025
Wide Bay	51	36	. . .	20,787
Burnett	372	6,409	. . .	204,734
Maranoa	62	5,639	. . .	8,500
Total	32,583	978,881	5,679	4,391,299
Total in Sydney Dis.	97,400	1,366,164	65,216	6,530,542
Port Phillip District, within settled District				
Bourke	2,000	30,500	2,550	137,600
Grant	627	8,056	535	267,300
Normanby	888	15,698	247	179,975
Belfast	65	208	59	81
Alberton	612	16,638	368	26,007
Total	4,192	71,100	3,759	610,963
Commissioners' Districts, beyond the settled District.				
Gipps' Land	1,070	37,985	500	193,961
Murray	3,483	84,942	. . .	521,997
Portland Bay	3,825	122,065	. . .	1,869,130
Western Port	3,233	54,158	1,100	1,196,698
Wimmera	692	16,438	300	737,528
Total	12,303	315,588	1,900	4,519,314
Total P. Phillip Dis.	16,495	386,688	5,659	5,130,277
General Total	113,895	1,752,852	70,875	11,660,819

Years.	Horses.	Horned Cattle.	Sheep.	Swine.
1788	7	7	29	} No returns
1810	1,114	11,276	34,550	
1820	4,014	68,149	119,777	
1825	6,142	134,519	337,622	
1828	12,479	262,868	536,391	
1848	113,895	1,752,852	11,660,819		70,875

Such a rapid augmentation in the number of domesticated animals is unexampled in the history of any country, and would have been yet more remarkable, but for the extensive slaughtering of horned cattle and sheep to obtain tallow. What the amount may be at the next decimal period, it is impossible to say; the extensive regions to the northward recently found available for pasturage, will give an additional stimulus to the production of animal food and wool.

Live stock is becoming a staple export of New South Wales; horses are being largely purchased by the East India Company as remounts for their cavalry and horse artillery; and when steam navigation is established between India and Australia, this will probably prove a very lucrative traffic, as the horses of the southern colonies are well suited to withstand the trying climate of India. The following shews the trade in live stock for the last few years:—

Live Stock Imported.

Year.	Horses.	Horned Cattle.	Sheep.	Sheep and Hogs.
1837	92	97	55,208	307
1838	185	74	9,822	192
1839	652	135	17,567	359
1840	1,008	244	19,958	252
1841	875	156	530	50 Hogs
1842	113	89	638	65 Ditto
1843	31	28	609	4 Ditto
1844	52	21	307	—
1845	693	48	811	2
1846	655	29	1,228	—
1847	591	22	2,285	—
1848	255	26	1,363	—

Note.—The Sheep have principally been imported from Van Diemen's Land to the District of Port Phillip. The Horses have chiefly come from South America.

Live Stock Exported from N. S. Wales and P. Phillip.

Year.	Horses.	Asses and Mules.	Horned Cattle.	Sheep.	Hogs.	Value.
						£.
1843	248	2	1,852	77,116	—	41,915
1844	489	3	3,329	53,318	—	40,394
1845	1,159	—	3,972	33,651	6	53,438
1846	1,021	—	6,052	37,848	4	52,942
1847	466	—	8,034	71,440	—	57,355
1848	1,182	—	16,904	895,211	—	85,184

China, some of the concentrated soup prepared in New South Wales, and found it excellent. Samples of the salted meats sent to England have been pronounced equal to the beef provided by the Cork contractors for the navy; the climate is sufficiently cold to admit, during the season, of perfect curing, and it is to be hoped that her Majesty's government will allow her Majesty's ships on the East India station to be provisioned from Australia.

The colonists have now turned their attention to the curing of animal food, which will, doubtless, soon form a valuable item in their staple products. I used, while in

The following table shows the quantity and value of salt meat exported from, and the value of salt meat imported into, the colony in the under-mentioned years:—

Year.	Beef, Pork, and Mutton.	Mutton and Bacon Hams.	Tongues.	Value as entered in Returns of Exports.	Value as entered in Returns of Imposts.
	Quantity.	Quantity.	Quantity.		
1843	2,867 casks 856½ tons	—	224 lbs.	£13,924	£19,286
1844	4,292 casks 294¾ tons 1,142 casks 425½ tons	20,615	110 cwt. 150 in No.	18,730	3,355
1845	345 packages 4,400 lbs. of preserved meats 721 casks	94 cwt. 11,422 in No.	63 casks 2,450 in No.	12,163	5,200
1846	1,126 tons 12 packages of preserved meats 4,335 casks	39 cwt. 300 in No.	12 casks 300 in No.	15,664	7,197
1847	866 tons 224 packages of preserved meats 2,308 casks	224 cwt.	127	24,278	3,917
1848	616 tons 90 casks of preserved meats	145 cwt.	228	19,477	3,229

The extensive herds of cattle will naturally cause a large increase in the hide and leather trade; the imports and exports of hides, and of manufactured and unmanufactured leather, is thus shown, from 1843 to 1848:—

Year.	Value Imported.	Value Exported.
1843	£36,185	£10,305
1844	19,844	22,285
1845	14,124	40,866
1846	15,230	28,999
1847	21,283	39,001
1848	24,358	25,939

The consumption of meat in Australia is very great: it is eaten three times a day; two hardworking bushmen will consume forty pounds in a week without difficulty; on farms beef is generally used, at pastoral stations, mutton; or they are alternated; one week four or five sheep are killed, next week a bullock. Both beef and mutton

yield to the palate a richer flavour than the generality of meat in England. Poultry is reared in considerable quantities for the markets of Sydney; and in the neighbourhood of the principal towns, Mr. Alexander Harris says he has seen "a whole flock of turkeys almost keeping themselves on the wild grasshoppers and such vegetable matters as they could pick up." Geese, ducks, and barn-door fowl multiply with astonishing rapidity. Sydney has a population of about 50,000 inhabitants, and the following is a statement of the live stock slaughtered in the city during 1848—viz., horned cattle, 30,613; sheep, 95,824; and pigs, 8,457.

Estimating the cattle at 830 lbs. each, the sheep at 70, and the pigs at 100, the quantity of meat would be 127,282,000 lbs., equal to six pounds three quarters per day for each mouth. There are, however, large exports of meat.

But it is not only in the article of animal food that New South Wales is now independent; the colony grows very nearly sufficient corn and vegetables for its annual wants. It will be seen by the following, that the value of vegetable food imported, has been diminished from more than a

quarter of a million sterling to less than fifty thousand pounds; and, by the subsequent table, that the colony is now exporting grain and flour. What a contrast this presents to the statements of famine and impending destruction which mark the early history of the colony:—

Articles.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
IMPORTS:—											
Wheat . . bushels	79328	171207	290843	239224	163224	395374	265704	109355	237717	224720	143235
Maize	6040	30862	19185	12773	1120	553	17	—	536	—	—
Barley, Oats, and Peas . . bushels	58927	64093	63363	41610	37798	61361	35194	46399	46454	37469	49163
Flour and Bread lbs.	2478712	3579076	7108663	14929503	7247016	6941760	{ 4370240 & 250 casks of Biscuit }	3327632	5367936	5335680	3131744
Rice	728346	1414747	6849896	3603076	2260046	1678208	260288	450040	1283968	1044288	932582
Potatoes	1167	1189	1723	480	1401	537	1085	430	2663	1227	1617
Value of Imports . £	64313	285110	217063	201632	113070	112387	65442	39855	63764	52740	41489
EXPORTS:—											
Wheat . . bushels	—	—	—	—	—	273	825	1362	6252	8820	485
Maize	—	—	—	—	—	4687	26184	5334	1867	62262	27058
Barley, Oats, and Peas . . bushels	—	—	—	—	—	1870	1798	292	545	4216	1300
Flour and Bread lbs.	—	—	—	—	—	3146192	2028344	2837632	3491744	1786400	650832
Potatoes	—	—	—	—	—	47	60	50	3	84	5
Value of Exports . £	—	—	—	—	—	13486	12232	13931	12258	16944	6639

WOOL.—The origin, progress, and the production of this valuable commodity deserve especial notice, from the material share it has had in the growing prosperity of Australian commerce, and moreover for its beneficial influence on the manufactures of the mother country. There can scarcely be a doubt, that the extensive growth of wool in Australia, and the reduction of price in German and Spanish wools, have had a most important effect on the woollen manufactures of England, and enabled her to maintain a competition with foreign countries. The manufacture of wool is the oldest known branch of trade in England; it existed during the period when the Romans were encamped among the Britons; and although the trade was greatly fostered by Edward III., there are notices on the statute book 100 years prior to that period, relative to "broad cloths two yards within the lists." For several centuries, it was a favourite policy of English monarchs and statesmen to encourage the wool trade; and to such an extent was this feeling carried, that it was deemed politic even to suppress the manufacture in Ireland. At the end of the seventeenth century, the value of the wool shorn in England was estimated at £2,000,000. The number of sheep and lambs in the United Kingdom is now estimated at about 40,000,000, and the annual production of wool at about 120,000,000 lbs. This, however, is a very vague estimate, which there are no agricul-

tural statistics in Britain to verify or disprove. It was, however, admitted, in the evidence before the House of Lords, in 1828, that a great deterioration had taken place, during the previous thirty years, in the fineness of English wools; the efforts of agriculturists having been directed to the weight of the carcase and of the wool—the lean Herefordshire sheep yielding 1½ lbs. of fine wool; the fat Norfolk sheep yielding 3 lbs. of coarse wool. Hence it became necessary to import largely Spanish and Saxony wools, in order to maintain the character of our cloths.

In 1829, the quantity of foreign wools imported into the United Kingdom was 21,118,976 lbs.; of which 14,110,006 lbs. came from Germany; 3,751,714 lbs. from Spain; and 1,838,642 lbs., or about *one-twelfth part* from all the Australian colonies. In 1834, Germany sent us 22,634,615 lbs.; Spain, 2,343,915; Russia, 3,107,951; United States, 2,048,309; Italy, 2,550,819; Tripoli and Barbary, 1,977,816; Turkey and Greece, 1,474,522; South America, 1,099,052; and our Australian colonies, 3,558,091 lbs. The total importations for the year were 45,647,870; Australia did not therefore then contribute *one-tenth part* of the foreign wool required. In 1848, the total quantity of wool imported into the United Kingdom was 69,343,477 lbs.; of this Germany furnished 14,428,723; Spain only 106,638; Russia, 2,349,009; Italy, 736,137; Turkey, 690,300; Denmark,

1,381,356, South America, 7,384,931; British India, 5,997,435; Cape of Good Hope, 3,497,250; and Australia, 30,034,567 lbs., in the following proportions:—New South Wales and Port Phillip, 22,091,481 lbs.; Van Diemen's Island, 4,955,968; South Australia, 2,762,672; Western Australia, 129,295; and New Zealand, 95,151 lbs.; our colonies in the Southern Pacific therefore contributed nearly *one-half* of the whole wool imported in the year 1848; while Germany, on which the main reliance of our manufactures was placed, only sent about 300,000 lbs. more than it had done twenty years ago. The proportions of colonial to foreign wool imported for twenty years between 1826 and 1846, at intervals of five years, is thus shewn; the two figures represent so many million lbs. weight; by colonial wool is understood all wool from possessions of the British crown:—

Annual Averages of Five Years.	Foreign Wool.	Colonial Wool.	Total Importation.
1826—30	25	2	27
1831—35	34	4	38
1836—40	44	10	54
1841—45	36	22	58
1846	34	30	64
1848	40	29	69

In the preceding table, is added the year 1848, as a further comparison of the ratio of colonial and foreign wool importations: 1850 would be still better in behalf of our colonies; and let it be remembered that, in 1826, the proportion of colonial to foreign wool was only the 250th part of the annual imports.

The following table, prepared by the statistical department of the Board of Trade, in March, 1846, shews the importations of colonial wool compared with foreign wool, year by year, from 1818 to 1844; it will be seen that while the quantity of foreign wool has not been doubled in quantity, that of colonial wool has risen from nothing to 22,600,000 lbs., or more than the foreign importations in any of the six years ending 1824. It may also be noted that the admission of colonial wool, duty free, in 1825, had a powerful influence in stimulating production in the colonies; in one year (1826) the importation increased nearly fourfold; for seventeen years there was an annually increased production in our maritime possessions; and so much was this augmenting supply required, that for eight-and-twenty years the prices of English wools were maintained.

Importations of Foreign and Colonial Wool into the United Kingdom from 1818 to 1844, and prices of English Wools.

Years.	Duty.	Foreign Wool.	Colonial Wool.	Total.	Price of Southdown.	Price of Kent Long.
		lbs.	lbs.	lbs.	per lb.	per lb.
1818	$\frac{3}{4}$ d. per lb.	24,720,139	—	—	2s. 6d.	2s. 0d.
1819	6d. per lb.	16,094,999	—	—	1 7	1 3
1820	"	9,653,366	122,239	9,775,605	1 5	1 4
1821	"	16,416,806	205,761	16,622,567	1 3	1 1
1822	"	18,859,265	198,815	19,058,080	1 3	0 11
1823	"	18,863,886	502,839	19,366,725	1 3 $\frac{1}{2}$	1 0
1824	Dec. 1824:— 1d. per lb. of 1s. value $\frac{1}{2}$ d. per lb. under 1s. val.	22 147,540	416,945	22,564,485	1 2	1 1
1825	Colonial free	43,465,282	351,684	43,816,966	1 4	1 4
1826	"	14,747,103	1,242,009	15,989,112	0 10	0 11
1827	"	28,552,742	562,599	29,115,341	0 9	0 10 $\frac{1}{2}$
1828	"	28,628,121	1,607,938	30,236,059	0 8	1 0
1829	"	19,639,629	1,877,020	21,516,649	0 6	0 9
1830	"	30,303,173	2,002,141	32,305,314	0 10	0 10 $\frac{1}{2}$
1831	"	29,110,073	2,541,956	31,652,029	1 1	0 10 $\frac{1}{2}$
1832	"	25,681,298	2,461,191	28,142,489	1 0	1 0 $\frac{1}{2}$
1833	"	34,461,527	3,614,886	38,076,413	1 5	0 10 $\frac{1}{2}$
1834	"	42,684,932	3,770,300	46,455,232	1 7	1 7 $\frac{1}{2}$
1835	"	37,472,032	4,702,500	42,174,532	1 6	1 6
1836	"	57,814,771	6,425,206	64,239,977	1 8	1 8 $\frac{1}{2}$
1837	"	38,945,575	9,434,133	48,379,708	1 3	1 3
1838	"	42,430,102	10,164,253	52,594,355	1 4	1 5
1839	"	44,504,811	12,875,112	57,379,923	1 4	1 5 $\frac{1}{2}$
1840	"	36,498,168	12,938,116	49,436,284	1 3	1 2 $\frac{1}{2}$
1841	"	39,672,153	16,498,821	56,170,974	1 0	0 11
1842	"	27,394,920	18,486,719	45,881,639	0 11 $\frac{1}{2}$	0 10
1843	"	26,633,913	21,151,148	47,785,061	0 11 $\frac{1}{2}$	0 11
1844	from June 6th, free	42,473,228	22,606,296	65,079,524	1 2	1 2
1845	"	"	"	76,828,152	1 4	1 3

Until the Australian colonists began to send fine wools to England, the Germans and Spaniards had almost a monopoly of the supply, and their prices at one time ranged from 10s. to 12s. per lb.; now they are not one-fifth of that sum. The prices of Australian fine wools are about 1s. to 1s. 6d. per lb.

The facts connected with the origin of Australian wool-growing will be interesting to many. In 1793 the late John M'Arthur, then captain in the corps serving in New South Wales, assumed that the grasses and climate of Australia were adapted for the rearing of Merino sheep, and in 1797 he obtained from captain Kent, R.N., three rams and five ewes, of pure breed, which were sent to the Cape of Good Hope by the Dutch government, but not being valued by the settlers, captain Kent brought them to New South Wales. Mr. M'Arthur immediately began to cross his coarse-fleeced sheep with the Merino, and in ten years his flock, which consisted originally of seventy common Bengal sheep, was increased to 4,000, although the wethers were slaughtered as they became fit for food. In 1803 Mr. M'Arthur returned to England, exhibited samples of his wool to a committee of manufacturers who happened to be then in London, which samples were much approved. On the 26th of July, 1803, he addressed a letter to Lord Hobart, stating at length the progress made in producing wool of a "softness superior to many of the wools of Spain, and certainly equal in every valuable property to the very best procured from thence."

On the 4th May, 1804, captain M'Arthur addressed a memorial on the subject to the committee of the Privy Council for trade; and on the 6th July, 1804, appeared before that committee, and stated his plans for rendering England independent of foreign countries for a supply of the best wools. The Privy Council encouraged the views of the enterprising colonist, who stated that he was ready to take the risk and expense on himself. All he required was an allotment of 10,000 acres of grazing land, and liberty to select thirty convicts as shepherds. The Privy Council finally, after hearing the evidence of governor Hunter, and other conclusive testimony, recommended that a reasonable grant of pasture land should be made to captain M'Arthur, instead of to a company, as proposed, and that the governor be instructed to feed the convicts on mutton, instead of salt provisions; for the

lords of the committee were "led to imagine and entertain hopes that wool of a fine quality may be produced in this colony; and that as wool of such fine quality is much wanted and desired by the manufacturers of cloth in England, it being mostly drawn, at this time, from a country influenced, if not dependent, on France, their lordships entertain no doubt that it is well deserving the attention of his Majesty's government, to encourage the produce of fine wool in the colony of New South Wales." King George the Third, who, at that time, paid great attention to agricultural and pastoral pursuits, entered into the patriotic views entertained by his Majesty's council, and captain M'Arthur obtained, from the Merino flock of the king, several ewes and rams, with which he returned, in 1806, on board a vessel appropriately named the *Argo*, to the land so fortunate in being adopted by him for the scene of his meritorious labours.

Such was the commencement of the rapidly-increasing flocks of fine-woolled sheep in Australasia, which now (1850), including all the southern colonies, number at least 12,000,000, which contribute annually about 25,000,000 lbs. to the manufacturers of the United Kingdom, and which, within the next five years, will most probably not furnish less than 50,000,000 lbs. yearly, whereby our labouring population will be enabled to exchange flimsy cotton garments for warm woollen clothing, better suited to our climate.

That this is not an exaggeration will be admitted, when we consider that New South Wales possessed, in 1843—sheep, 5,000,000; 1848 (January), 10,054,000. An increase of cent. per cent. in four years—*five million in four years*. The annual augmentation has been about 1,250,000, notwithstanding the prodigious number slaughtered for their tallow, as will be presently shown. Mr. Arthur Hodgson states the number killed, in 1847, at 181,000; and that 70,000 were exported to New Zealand and the islands of the Pacific. It is reasonable to infer, that the annual increase on eleven to twelve million sheep in the next five years, will be not less than 2,500,000 per annum, which will raise the number of sheep to nearly 25,000,000 in the year 1855: these flocks, at only two pounds of wool per fleece, would yield 50,000,000 lbs. weight of wool.

The following statement gives the quantity of wool annually shipped from New

South Wales, from 1807 to 1836, a period of five-and-twenty years:—

Year.	lbs.	Year.	lbs.	Year.	lbs.
1807	245	1821	175,433	1829	1,005,333
1808	562	1822	172,880	1830	899,750
1811	167	1823	198,240	1831	1,401,284
1815	32,971	1824	275,560	1832	1,515,156
1816	73,171	1825	411,600	1833	1,734,203
1817	13,616	1826	552,960	1834	2,246,933
1818	86,525	1827	407,116	1835	3,893,927
1819	74,284	1828	834,343	1836	3,693,241
1820	99,415				

This shows an augmentation from 245 to 3,693,241 lbs. In the annexed table the return is continued, and the value is added, proving, in twelve years, a quintupling in quantity, viz.—from 4,448,796 to 22,969,711 lbs., and a quadrupling in value:—

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lbs.			lbs.	
1837	4,448,796	£332,166	1843	12,704,899	£685,647
1838	5,749,376	405,977	1844	13,542,173	645,344
1839	7,213,584	442,504	1845	17,364,734	1,009,242
1840	8,610,775	566,112	1846	16,479,520	1,019,985
1841	8,390,540	517,537	1847	22,379,722	1,272,118
1842	9,428,036	595,175	1848	22,969,711	1,240,144

TALLOW promises to form nearly as valuable an article of export as wool; it is a branch of traffic which originated in the recent commercial depression of the colonists in New South Wales. In 1840–1 there was considerable speculation in the purchase of land by the colonists; and the money thus laid out was transmitted to England, for the conveyance of emigrants to the colony. Had the land been bought in the United Kingdom by capitalists here, the colonists would have been benefited; but the reverse was the case. Between November, 1840, and November, 1841, the local government withdrew about £260,000 from the colonial banks; and, in 1841, upwards of £300,000 was paid for immigration. The colony could have borne this abstraction of capital, if it had been gradual; but the suddenness of the withdrawal of so large a sum, necessarily brought on a monetary crisis, which the want of foresight on the part of the governor and authorities at Sydney, and their incapability of supplying any remedy, rendered most distressing in its consequences.

In 1841–2 the colonial banks, partly in self-defence, in the midst of a full swing of pastoral activity and commercial enterprise, suddenly reduced the amount of discounts; and, to use a familiar expression, brought the whole of the colonists “on their haunches.”

In 1841, the advances of the banks, chiefly on bills and promissory notes, was £2,582,203; in 1843 this sum was reduced to £1,583,137, and a large part of this consisted of “locks-up,”—or bills renewed from time to time. The importations from England had been excessive; quantities of articles, sufficient for two or three years' consumption, were imported at once, and must be paid for; the price of wool had been falling for several years in England; added to this, the government raised the selling price of land, and, nearly simultaneously, transportation ceased—and with it, the annual supply of convict labour, and the large governmental expenditure furnished by the British exchequer. It was not surprising, therefore, that cash, or a representative medium of exchange, became exceedingly scarce in New South Wales—and, as a necessary consequence, the price of every commodity fell far below its intrinsic value; men were compelled to make any sacrifice, to try and meet their engagements—there was almost universal bankruptcy—and the power of the monied classes to ruin a nation or community, when that community is dependent for the daily interchange of all its wants, on a very limited amount of gold or silver coin, became fearfully apparent. Sheep, the staple of the colony, fell from ten shillings to sixpence or one shilling each; and, even at that price, were only received in barter, or in payment of debts; everything else, but the few sovereigns in the colony, fell in like proportion. So great was the distress, that most of the mercantile houses and persons reputed of great wealth, were declared insolvent: their numbers stood thus in—

	1842.	1843.	1844.	Total.
Sydney . . .	600	535	221	1,356
Melbourne . .	113	124	45	282
Total . . .	713	659	266	1,638

According to an intelligent colonist, Mr. Westgarth, the collective debts of these 1,638 insolvent estates amounted to no less than three-and-a-half million sterling, and the assets were merely nominal; for, as he truly observes, “many extensive merchants and large proprietors beheld the ample substance they were once possessed of, gradually disappear with the reduced value of their land, live stock, and other property.” Mr. Braim mentions, that at the period of depression, he heard a rich man in Sydney state in a most lugubrious tone, that he had been obliged

to take, in payment of a debt, 10,000 sheep, at Moreton Bay, at 1s. each. So little did he think of his bargain, that he put them in flocks of from ten to fifteen hundred, and removed the ewes, to prevent the increase, and consequent addition to his expenses of management. Many of the large flock owners determined to slaughter their fat sheep and horned cattle, and boil them down, so as to obtain the largest quantity of tallow from the carcase, which, as meat, was valueless. The example was set by a stock owner named O'Brien, who rightly conceived, that the mere fat of the animals would be more valuable in England, than the entire animals were in New South Wales. The mode of "boiling down" consists in throwing the entire carcase, except the hind legs, of the sheep or bullock, into a large boiler or vat, and by the process of steaming, the whole of the fatty parts are extracted and received into casks, ready for shipment to England. The hind legs, which contain but little fat, are sold, and the price of good mutton is thus reduced to one penny, or even a halfpenny per pound.

The extent to which the slaughtering system has been carried, is shown in the following statement of the quantity of tallow and lard produced in New South Wales in 1848:—

Number of Boiling-down Establishments, Cattle, Sheep, &c., slaughtered, and Tallow and Lard produced.

Number of	Sydney, within the settled Dis.	Sydney, without settled Dis.	Port Phillip District.	Total.
Establishments	41	14	7	62
Sheep	141,573	24,128	120,691	286,392
Horned Cattle	27,682	5,415	5,545	38,642
Tallow, cwts. .	49,311	11,530	27,725	88,567
Hogs	23	33	2	58
Lard, cwts. .	875	990	200	2,065

The system has now been in operation for six years; in 1843, there was produced 5,680 cwts. of tallow, value £9,639; in 1848, 98,213, value £140,579.

Year.	Quantity.	Value.
	Cwt.	
1843	5,680	£9,639
1844	56,609	83,511
1845	71,995	102,746
1846	20,357	28,107
1847	69,690	108,186
1848	98,213	140,579

Mr. Gideon S. Lang, in a work on "Land and Labour in Australia," furnishes the following estimate of the wool and tallow

which will be produced when one-third of the area of the district of Port Philip is occupied, and the stock of the middle district of the colony has increased in the same proportion—sheep and cattle in the same ratio to each other as at present:—

—	Sydney.	Port Phillip.
Sheep.	8,631,250	5,000,000
Cattle	2,125,300	500,000
Cast five years old	2,151,310	1,100,000
Consumption, export, & dead	774,907	562,200
Melted	1,377,373	537,800
Tallow (20 lb. per sheep, } 186 lbs. per hd. of cattle }	33,493	8,900
Wool, 2 $\frac{3}{4}$ lbs. per sheep . .	23,735,937	13,750,000

Value of the above produce in Britain—wool, 37,485,937lbs., at 1s. 3d. = £2,342,871; tallow, 42,393 tons, at £40 per ton = £1,695,720. Total—£4,038,591.

At no distant day, Australia will render us independent of Russia, for the supply of tallow, as it has already done of Germany or Spain, for the supply of wool.

WINE AND BRANDY. — The number of acres planted with the vine, and the produce thereof, on the 31st of March, 1849, was as follows:—

Counties.	Acres.	Wine.	Brandy.
SYDNEY DISTRICT:—			
Argyle	7	Gallons. 50	Gallons. —
Bathurst	4	450	—
Bligh	3 $\frac{1}{4}$	74	—
Brisbane	79	4,467	4
Camden	60	21,350	260
Cook	24	330	—
Cumberland	259	17,413	352
Durham	162	29,808	75
Georgiana	—	—	—
Gloucester	82	4,045	72
Hunter	19 $\frac{1}{2}$	957	—
King	6	25	25
Macquarie	22	4,300	280
Murray	6 $\frac{1}{2}$	30	—
Northumberland	112	11,001	95
Phillip	1 $\frac{1}{2}$	180	—
Roxburgh	25	2,560	—
St. Vincent	—	—	—
Stanley	2 $\frac{1}{2}$	—	—
Wellington	—	—	—
Westmoreland	0 $\frac{3}{4}$	—	—
Beyond settled Dis.	11	260	—
Total in 1848	887	97,300	1,163
„ in 1844	508	33,915	751
PORT PHILLIP DIS.:—			
Bourke	57	—	—
Grant	48	6,000	100
Normanby	3	306	—
Total	108	6,306	100
Gen. Total in 1848	995	103,606	1,263

Australia will become an extensive wine country; the grape thrives in every locality, although in some soils better than in others; and the wine made has not the earthy flavour peculiar to some of the Cape of Good Hope wines. The manufacture is yet in its infancy.

The Australian wines bear a strong resemblance to good Sauterne, Barsae, Hock, Claret, &c. Lieutenant-colonel M'Arthur recently visited several of the wine districts in Germany and France, selected experienced vine cultivators, and manufacturers of wine and brandy, whom he has sent out to the colony with their families; and he will thus have the honour of conferring on the colony a benefit nearly equal to that which his respected father conferred by the introduction of fine-woolled sheep. Sir T. L. Mitchell, the surveyor-general of New South Wales, in 1847 visited Spain, and obtained useful information on the mode of preparing raisins, that he might be still more extensively useful to the land of his adoption. The olive and mulberry are peculiarly fitted to the soil and climate of New South Wales; and olive oil and silk may, ere long, be added to its list of products. Indigo grows wild in several districts in New England, where the soil and seasons are well adapted for the growth of coffee, tea, cocoa, and sugar. Cotton and tobacco ought also to become very valuable articles of export. Moreton Bay, and the regions to the northward, to which Dr. Lang has drawn public attention, will doubtless, in time, possess great plantations of cotton, tobacco, rice, and other articles which we now receive from the United States. Australia can procure from India, from China, and from the islands of the Eastern Archipelago, any required quantity of free labour, skilled in the cultivation of these great staples of European consumption, at a price of fourpence or sixpence per day; and I confidently look forward to the period when

the intercourse between England and Australia will constitute one of the largest and most lucrative portions of the traffic of the British empire.

The extension of pasturage is furnishing an increasing supply of dairy produce, which will not only render the colonists independent of foreign supplies, but also yield a surplus for export. The decreasing imports and increasing exports of butter and cheese are thus stated, from 1843 to 1848:—

Year.	Imported.		Exported.	
	Quantity.	Value.	Quantity.	Value.
	lbs.		lbs.	
1843	248,170	£9,497	81,173	£3,488
1844	60,704	1,184	188,174	3,717
1845	22,216	579	172,368	4,313
1846	45,456	1,062	100,287	3,665
1847	10,164	413	253,880	5,977
1848	15,456	417	216,130	4,116

The cheese and butter made in New South Wales are excellent; "Mrs. Rankin's cheese," prepared at Bathurst, would sell well in England; other ladies are now turning their attention to a matter peculiarly within their province, and the markets of India and China will take off their hands whatever they can prepare.

Timber has not hitherto formed a large article of export; in the earlier condition of the colony, cedar and blue gum were its staple products; but other and more valuable items have usurped their place. The country around Moreton Bay must, however, contain abundance of good furniture wood, which is always in demand in England. The following shows the imports and exports of timber for several years into New South Wales. In the book on Western Australia the quality of the Australian woods will be stated:—

Imports for the under-mentioned years.

Year	Deals.	Other Timber.					Sandal wood.	Total Value.
		Sawn, &c.	Wrought.	Shingles.	Laths.	Paling		
	Quantity.	Quantity.	Quantity.	Quantity.	No.	No.	Tons.	
1843	12,327	{ 212,890 ft. 509 loads }	82 packages	3,000	115,000	172,000	107	£10,156
1844	2,951	{ 101,228 ft. 108 loads }	54 do.	{ 414,000 3 loads }	—	500,000	90	4,195
1845	{ 10,457 256 loads }	{ 604,524 ft. 541 loads }	5 prs. sashes	2,118,685	254,500	128,630	415	10,541
1846	31,256	1,255,569 ft.	—	{ 1,485,000 15½ loads }	461,750	392,570	44	10,278
1847	22,418	2,483,431 ft.	—	2,633,600	1,424,800	675,742	351	14,951
1848	17,952	2,652,970 ft.	—	4,199,000	1,320,900	767,915	50	16,347

Exports for the under-mentioned years.

Year.	Quantity of Cedar.	Quantity of Blue Gum, Pine, and other Timber.	No. of Treenails and Spokes.	Value.
1828	847,805 superficial feet . .	215,541 superficial feet . .	65,837	£11,428
1829	940,486 . . ditto	608,647 . . ditto	181,817	16,293
1830	368,830 . . ditto	179,403 . . ditto	23,959	5,218
1831	580,393 . . ditto	416,857 . . ditto	24,316	8,401
1832	418,930 . . ditto	233,653 . . ditto	186,831	6,132
1833	1,086,437 . . ditto	147,170 . . ditto	328,503	13,153
1834	899,492 . . ditto	30,065 . . ditto	212,467	7,941
1835	907,921 . . ditto	145,628 . . ditto	178,969	10,489
1836	1,409,467 . . ditto	3,778 . . ditto	35,094	14,385
1837	116,828 . . ditto	18,828 . . ditto	62,989	14,463
1838	699,066 . . ditto	9,000 . . ditto	73,450	6,382
1839	729,001 . . ditto	823 deals } 15 logs }	40,588	8,815
1840	1,250,786 . . ditto	151,500 superficial feet . .	4,350	20,971
1841	513,139 . . ditto	1,000 . . ditto	26,890	7,004
1842	522,882 . . ditto	27,404 . . ditto	55,644	5,800
1843	944,121 . . ditto	10,020 . . ditto } 30 logs }	155,294	9,813
1844	1,222,533 . . ditto	99,500 superficial feet } 33 logs }	105,428	8,825
	214 pieces			
	24 logs			
1845	781,415 superficial feet . .	73,300 feet . . } 241 logs, &c. }	105,908	8,074
1846	956,515 . . ditto	390,006 feet	113,972	7,851
1847	953,995 . . ditto	46,850 feet	165,648	7,333
1848	863,507 . . ditto	22,150 feet	76,201	5,675
		20 pieces		
		7,600 shingles and palings }		

Note.—1844, Also a large quantity of Timber, the measurement of which was not stated when entered at Custom House.

The manufactories in 1848 were:—

Manufactories, &c.	Sydney.	Port Phillip.	Total.
Grinding and dressing grain:—			
Steam	57	8	65
Water	56	7	43
Wind	25	1	26
Horse	39	2	38
Total	157	18	175
Distilleries	2	—	2
Rectifying and compounding	2	—	2
Breweries	12	9	21
Sugar refining	2	—	2
Soap	15	3	18
Tobacco and snuff	4	—	4
Woollen cloth	6	—	6
Hat	4	—	4
Rope	4	—	4
Tanneries, &c.	33	7	40
Salt	2	—	2
Starch	1	—	1
Blacking	2	—	2
Patent oatmeal and groats	1	—	1
Salting establishments	1	1	2
Meat preserving ditto	3	—	3
Potteries	7	—	7
Glass works	—	1	1
Smelting ditto, copper	1	—	1
Iron and brass founderies	11	2	13
Patent slip for ships	1	—	1
Steam vessels	17	—	17
Fire engines	3	—	3

At the woollen manufactories there were made, in 1847, of cloth, 18,484 yards; of tweeds, 156,604 yards; and blankets, 424. The *tweeds*, an excellent fabric, command a ready sale, and are now becoming an article of export; the manufacture will, doubtless, be extended. The materials for making soap abound; the thirteen soap manufactories made, in 1848, 24,180 cwt. The tobacco manufactured is about 1,000 cwt. annually, and as the climate is well suited for its culture, the preparation of the "weed" will, doubtless, be improved. One sugar-refining establishment, in 1848, turned out 26,000 cwt. of refined sugar. The preceding list of manufactories shows how greatly the colonists desire to render themselves independent of supplies which increase their imports, and for which they have not yet adequate exports. In the article of blacking, alone, they say the value of imports has been reduced by £10,000 annually; it will, however, be a sounder policy, to increase the number and quantity of their exports for the English market, by which they will be enabled to procure manufactured articles at a far cheaper rate than they could be prepared in the colony.

The minerals will ultimately be a source

of wealth. The coal mines in the colony, their produce in 1848, and the value of it, was :—

Mines.	Coal.		Value.
	Tons.		
Aust. Agric. Co. Newcastle	34,381	£11,737	
Ditto at Lake Macquarie . . .	1,700	510	
Ditto at Burwood	1,738	608	
Ditto at Maitland	7,023	1,265	
Ditto at Morpeth	205	35	
Ditto at Moreton Bay	400	120	
Total	45,447	14,275	

All but the first-named mine are in the early stages of their working; some only commenced in 1848.

There are five copper mines commencing work, viz.—at Bathurst, Yass, and Molong. The Fitzroy iron mine at Berrina has had its machinery put up and shaft sunk in 1848. *The following remarks were written and stereotyped in 1850, before the recent extensive discoveries of gold—for which see Supplement.*] If gold, as is expected, be found in large quantities, another valuable article of export will be provided; for the precious metal will henceforth become a merchantable commodity, and rank among exchangeable products. Gold is a raw product, and answers the same purpose as wool, tallow, oil, timber, copper, iron, or any other article, in enabling its finders to purchase such merchandize as they may require. If, therefore, gold exists in Australia, to an extent at least equal to that found in California, there can be no reason for preventing the colonists gathering it. Every pound of gold raised in the mines or valleys of the Australian Alps, will enable the colonist to purchase a pound's worth of English manufactures. The currency of the United Kingdom is very far below the amount required for a remunerating interchange of labour and goods. In England, the whole gold, silver, copper, and bank-note currency, in *actual circulation*, is not £3 sterling per head; in Scotland, it is nearly £5; in Ireland, it does not amount to much more than *ten shillings* for each inhabitant: whereas a full currency ought, at the very least, be equal to £10 sterling per head, otherwise the nation is exposed to the vicissitudes arising from the alternate states of a deficiency or a plethora of money: panic succeeds prosperity in a vicious circle, rendering commerce a gambling game, and enterprise a hazardous speculation. The

production of large quantities of gold in Australia would, therefore, be a great gain to the colonists, and a boon of incalculable value to the people of England.

The important subject of emigration will be fully discussed in the last volume of this work, and a fair examination be made of the relative advantages and prospects of the several colonies for different classes of emigrants; it will consequently be only desirable to give here the annexed statement of the average prices of food, and the general wages of labour in New South Wales during the year 1848, by which intending emigrants of the poorer class can judge the cost of living, and the means available for its support. It is calculated that New South Wales could with ease afford remunerative employment annually to 10,000 additional able-bodied immigrant labourers for the next ten years; and there is no country better adapted for a man whose power of manual labour is his sole property, and who possesses the indispensable requisites of honesty, sobriety, and persevering industry :—

Average Prices of Produce during 1848 at Sydney.—Wheaten flour, 10s. to 12s. per 100 lbs.; wheat, 4s. to 4s. 6d. per bushel imperial; wheaten bread, 2½d. to 3d. loaf of 2 lbs.; maize, 1s. 5d. to 1s. 10d. per bushel; barley, 2s. 6d. to 3s. 6d.; oats or rye, 3s. 6d. to 4s. 6d.; potatoes, 3s. to 6s. per cwt.; hay, £4 to £6 per ton; straw, £2 5s. to £2 10s.; horned cattle, £2 5s. to £2 10s. per head; horses, £4 to £20 each; sheep, 5s. to 7s. 6d. per head; goats, 5s. to 15s. each; swine, 7s. 6d. to £2; milk, 6d. per quart; butter, fresh, 6d. to 1s. per lb.; salt, colonial, 5d. to 10d.; cheese, colonial, 4d.; fresh beef, 1½d. to 2d.; mutton, 2d.; fresh pork, 4d. to 5d.; rice, 2½d.; coffee, 8d.; tea, 1s. 4d.; moist sugar, 2½d.; salt, 1d.; wine (Cape), 4s. per gallon; brandy, 16s.; rum, imported, 10s.; beer, colonial, 1s. 4d.; tobacco, imported, 3s. 2d. per lb.; tobacco, colonial, 1s. 3d.

Wages of Labour.—Domestic, male, £18 to £40 per annum; female, £12 to £25; predial, £18 to £25; trades, £35 to £40.

Weights and Measures, as in England.

Fruits and Vegetables.—The fruits and culinary vegetables of Australia are numerous and of excellent quality. In a small garden at Paramatta I had the apple, pear, peach, nectarine, apricot, loquat, quince, cherry, plum, melon, pine-apple, figs, citron, orange, grape, mulberry, walnut, gooseberry, strawberry, raspberry, and currant, all in full perfection. So abundant is the peach, that, in many places, I have seen the farmers feeding their pigs with the windfalls of their teeming orchards. My lamented friend, the late Allen Cunningham, informed me, that during his explorations in the interior, he and his men were often refreshed

and nourished by finding peach-trees scattered about in the forest, where they had grown from stones planted by bush-rangers, or from having been dropped by birds. In grateful recognition of the benefits thus received, as a weary and fainting traveller, Cunningham always carried about him a bag of peach stones, which he planted on every occasion, in suitable places. The small settlers make a cider and a brandy from their peach fruit.

Among other fruit-trees, besides those above-named, are the almond, which flourishes remarkably well; banana, in the more northern positions. The fig produces two crops in the year, without any further trouble than that of planting: the fruit is of the finest flavour, abundant in quantity, presses well, and will probably become a valuable article of export. Grapes, of every variety, are very plentiful, and are now being dried as raisins, as well as extensively manufactured into wine, brandy, and vinegar. The Chinese fruit, termed loquats, are as fine as any I ate in China. While on this subject, I venture to recommend to the colonists the introduction of the lichee, and other excellent fruit, which I obtained at Foochoofoo and at Shanghai. Our consuls at those stations could readily procure the young fruit-trees. Melons, water and sweet, grow almost wild in New South Wales. The farmers scatter a few seeds among their corn, and they thrive so luxuriantly as to be scarcely an article of sale, except in the towns. They sometimes attain a size of twenty-four pounds weight. The lemon flourishes as standards or as hedges. The orange arrives at a degree of perfection greater than I have witnessed in any other country excepting Malta. A richer sight can hardly be conceived than Mr. Suttor's orangerie near Paramatta. If I remember rightly, I walked through one grove of large orange trees, in full bearing, which was more than a quarter of a mile in length; and I believe the respected proprietor found it a very profitable article of production. Mr. Mobbs also realized a handsome fortune from his orangerie. The mulberry thrives in every part of the colony; and its growth may be augmented to an almost indefinable extent for the feeding of silkworms; but I would recommend the obtainment of a peculiar species of mulberry which grows near Nankin, and in the regions bordering the great river Yangt-tse-kiang, which is found by the experienced Chinese

to yield the finest silk. The neighbourhood of Port Stephens and Port Macquarie ought to be among the most productive silk countries in the world; and to render them so skilled, Chinese might be induced to settle in the country, bringing with them the mulberry and best silkworms. The olive affords great promise: wherever the vine yields well, there the olive generally thrives. I noticed how this valuable commercial shrub flourished at Ithaca, Cephalonia, and along the coast of the Morea, where the soil and climate were very similar to those of New South Wales. The walnut, filbert, and chestnut are in perfection, especially the filbert, which are of a size and flavour unsurpassed. All the culinary vegetables of Europe are of large size and excellent flavour. Potatoes, carrots, parsnips, turnips, onions, peas, beans, cabbages, spinach, artichoke, asparagus, celery, cucumbers, radishes, seakale, yams, rhubarb, &c., would be highly prized in Covent-garden market. The various beautiful flowers which adorn the gardens of England are extensively cultivated in New South Wales, where they attain a magnitude and beauty which add to their natural charms. The saying, that the fruits of Australia are without flavour, and the flowers devoid of odour, refers to those of the country, and not to the introductions from Europe. The annual exhibitions of the "Australian Floral and Horticultural Society," at Sydney, fairly rival those of Chiswick or Regent's-park; and the botanical gardens at Sydney, the governor's gardens at Paramatta, those of Mr. M'Arthur, and other colonists, are equal, in extent and variety, to many of the best gardens in the United Kingdom. The Englishman carries his love of fruits and flowers to whatever country he makes his home; and, in Australia, he has full scope for the gratification of his refined taste and habits.

MARITIME COMMERCE.—The trade of New South Wales was for many years in a very unsatisfactory state; the imports were in value about five times that of the exports, and the balance of payments in exchange was defrayed by bills on her majesty's treasury in London to meet the convict expenditure in the colony. There were then few exportable articles, and it was feared that no staple products available for transmission to England could be created. By extraordinary energy these difficulties have been surmounted; there is now no convict expenditure from the home exchequer, and an

examination of the annexed complete returns of the value of imports and exports for the last twenty years will shew, that they are now balanced the one against the other.

Imports into New South Wales and Port Phillip. [See Supplement for continuation of table.]

Year.	From Great Britain.	From British Colonies.	From South Sea Islands.	From Fisheries.	From United States.	From other Foreign States	Total.
1828	£399,892	£125,862	—	£44,246	—	—	£570,000
1829	423,463	135,486	—	42,055	—	—	601,004
1830	268,935	60,356	—	91,189	—	—	420,480
1831	241,989	68,804	—	179,359	—	—	490,152
1832	409,344	47,895	—	147,381	—	—	604,620
1833	434,220	61,662	—	218,090	—	—	713,972
1834	669,663	124,570	—	197,757	—	—	991,990
1835	707,183	144,824	£1,420	177,365	£13,902	£70,161	1,114,805
1836	794,422	220,254	1,972	135,730	22,739	62,289	1,237,406
1837	807,264	300,313	1,764	80,441	9,777	97,932	1,297,491
1838	1,102,127	309,918	5,548	71,506	8,066	82,112	1,579,277
1839	1,251,969	576,537	3,863	186,212	23,093	194,697	2,236,371
1840	2,200,305	431,146	1,348	104,895	24,164	252,331	3,014,189
1841	1,837,369	332,296	24,361	97,809	35,282	200,871	2,527,988
1842	854,774	298,201	10,020	64,999	20,117	206,948	1,455,059
1843	1,034,942	227,029	22,387	42,579	12,041	211,566	1,550,544
1844	643,419	153,923	10,624	32,507	17,187	73,600	931,260
1845	777,112	237,759	40,048	43,503	7,416	128,016	1,233,854
1846	1,119,301	262,943	21,799	56,461	4,459	165,559	1,630,522
1847	1,347,241	388,724	6,919	41,557	1,550	196,032	1,982,023
1848	1,084,054	263,787	2,642	73,715	2,065	130,287	1,556,550
1849							

Exports from New South Wales and Port Phillip. [See Supplement.]

Year.	To Great Britain.	To British Colonies.	To South Sea Islands.	To Fisheries.	To United States.	To other Foreign States.	Total.
1828	£81,008	£4,845	—	£6,708	—	—	£90,050
1829	146,283	12,692	—	15,821	—	—	161,716
1830	120,559	15,597	—	—	—	—	141,461
1831	211,138	60,354	—	16,949	—	—	324,168
1832	252,106	63,934	—	19,545	—	—	384,344
1833	269,508	67,344	—	—	—	—	394,801
1834	400,738	128,211	—	28,729	—	—	587,640
1835	496,345	83,108	£2,696	39,882	£18,594	£3,011	682,193
1836	513,976	136,596	9,628	30,180	13,697	2,625	748,624
1837	518,951	157,975	485	54,434	10,617	17,592	760,854
1838	553,154	160,640	7,137	33,988	11,324	6,525	802,768
1839	597,100	289,857	1,347	34,729	18,568	7,175	948,776
1840	792,494	520,210	6,621	27,864	27,885	24,618	1,399,692
1841	706,336	238,948	13,144	18,417	4,837	41,715	1,023,397
1842	685,705	298,023	3,005	22,862	17,101	40,715	1,067,411
1843	825,885	285,756	17,934	18,827	—	23,918	1,172,320
1844	854,903	236,352	14,106	11,623	—	11,131	1,128,115
1845	1,254,881	276,788	17,656	1,593	—	5,068	1,555,986
1846	1,130,179	328,922	13,441	590	—	8,407	1,481,539
1847	1,503,091	335,137	14,231	—	—	17,587	1,870,046
1848	1,483,224	335,887	6,944	—	—	4,313	1,830,368
1849							

The relative proportion of the shipping engaged in the trade of Sydney, New South Wales, and of Melbourne, Port Phillip, is thus shown by the tonnage entering inwards from Great Britain, the British colonies, and elsewhere, in 1848:—

—	From Great Britain.		From British Colonies.				From South Sea Islands.		From Fisheries.		From United States.		From other Foreign States.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Sydney . .	71	34,309	106	23,877	233	45,173	23	2,695	63	17,473	1	406	30	7,753	527	131,686
Port Phillip	48	23,265	106	956	406	42,349	—	—	—	—	—	—	5	1,018	469	67,618
Total .	119	57,604	116	24,883	639	87,522	23	2,695	63	17,473	1	406	35	8,771	996	199,304

The number and tonnage of vessels which entered inwards in the colony of New South Wales (including the district of Port Phillip), from the year 1837 to 1848, inclusive, was—

Year.	From Great Britain.		From British Colonies.				From South Sea Islands.		From Fisheries.		From United States.		From other Foreign States.		Total.	
			New Zealand.		El. elsewhere.											
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1837	56	21,816	36	5,480	233	33,751	5	581	48	13,004	5	1,220	17	4,262	400	80,114
1838	102	41,848	38	4,291	241	34,469	6	616	31	7,928	1	274	9	2,351	428	91,777
1839	137	58,123	51	8,368	290	45,928	7	836	36	9,321	4	1,177	38	11,721	563	135,474
1840	190	80,806	68	13,123	347	53,625	6	750	27	8,087	8	2,520	63	20,047	709	178,968
1841	251	106,332	48	7,601	322	43,922	3	358	23	6,163	13	4,754	54	14,648	714	183,778
1842	137	55,144	81	14,085	282	42,365	19	2,902	20	5,806	7	2,762	82	20,857	628	143,921
1843	87	35,914	43	6,229	325	43,934	25	4,194	30	7,967	5	1,116	43	11,510	558	110,864
1844	78	34,765	54	7,189	226	31,195	13	1,831	27	7,888	3	1,005	16	3,666	417	87,539
1845	80	29,954	62	6,237	364	47,532	24	2,612	37	11,900	1	243	29	6,874	597	105,352
1846	84	36,761	65	10,865	475	57,485	27	3,005	79	24,375	1	370	36	8,606	767	141,467
1847	88	37,941	75	10,516	565	69,614	25	2,443	78	22,558	1	160	46	11,672	878	154,904
1848	119	57,604	116	24,833	639	87,522	23	2,695	63	17,473	1	406	35	8,771	996	199,304

DUTIES levied under the authority of Acts of Parliament—(1.) Upon all spirits made or distilled in the colony, 3s. 6d. per gallon; (2.) Upon all rum or whisky imported, 3s. 6d. per gallon; (3.) Upon all other spirits and liqueres whatsoever imported, 6s. per gallon; (4.) Wine imported, fifteen per cent. additional value; (5.) Tea, sugar, flour, meal, wheat, rice, and other grain and pulse imported, 5s. per cent. additional value; (6.) Tobacco unmanufactured, 1s. 6d. per lb.; (7.) Tobacco manufactured, 2s. 6d. per lb.; (8.) All other goods, wares, and merchandize, not being the produce or manufacture of the United Kingdom, imported into the colony, ten per cent. additional value. Wine imported for the use of military and naval officers on full pay, *free of duty*.

There are also wharfage rates levied at public and private sufferance wharfs, and on all descriptions of goods imported: for instance, at public wharfs, on beer, per hhd. 6d.; on wine or spirits, 1s. per leaguer; on sugar, 1s. 4d. per hhd.; on unenumerated goods, 2s. 4d. per ton. There is also a rate levied of one halfpenny per ton per diem on vessels unloading or refitting, beyond a certain number of days; for instance, thirty-five days are allowed free for a ship of 500 tons.

Custom House Charges.

Description.	Custom House Charges.		Light House Dues.
	Entry.	Clear.	
For the entry inwards or clearance outwards of ships or vessels (vessels under 50 tons registered in Sydney excepted); for any steam vessels in the coasting trade from one port to another of New South Wales.	1s. 3d.	1s. 3d.	0s 0 $\frac{1}{2}$ d.
For every other vessel so emptied above 50 and not exceed. 100 tons	2 6	2 6	2 0
For every other vessel so emptied above 100 tons	7 6	7 6	0 2
For every other ship or vessel . . .	15 0	15 0	0 2

A Tonnage Duty is levied of 3d. per ton on all vessels above fifty tons entering any port in the colony, unless the same shall have been paid at any other port of the colony within the previous four months. Coasting vessels pay only once a-year.

Harbour Dues, varying from 5s. on vessels under fifty tons, to 30s. on vessels of 500 tons and upwards, are levied on entry of harbour, or on shifting anchorage, not for the purpose of leaving port. Coasting vessels from one port of the colony to another exempted.

The value of the trade in articles of British and British colonial produce and manufacture, is shewn in a return only complete for the last five years. It includes, as does the previous and subsequent statements, Port Phillip, which is given separate in Supp^t.

Imports.

Year.	United Kingdom.	British Dominions.	Foreign States.	Total.
1844	£629,510	£154,572	£147,178	£931,260
1845	786,514	156,491	290,849	1,233,854
1846	1,111,238	88,638	430,646	1,630,522
1847	1,269,183	95,118	617,722	1,982,023
1848	1,029,926	114,900	411,724	1,556,550

Exports.

Year.	New South Wales.	United Kingdom.	British Dominions.	Foreign States.	Total.
1844	£864,709	£119,197	£64,266	£79,943	£1,128,115
1845	1,269,062	100,901	110,160	75,863	1,555,986
1846	1,201,433	120,424	80,499	79,183	1,481,539
1847	1,649,031	136,385	15,865	68,765	1,870,046
1848	1,621,509	127,368	22,220	59,271	1,830,368

It appears from the foregoing that imports from the United Kingdom of British produce and manufacture in 1848 were, in value, upwards of £1,000,000 sterling, or more than £5 per head of the population. The imports into the United States of British goods do not amount to ten shillings per head.

The increase of the imports of New South Wales between 1835 and 1840 was very remarkable; a few items will shew the progress of the colony in five years:—

Agricultural implements, in 1835, *nil*; in 1840, £4,565; apparel and slops, £58,658 and £144,890; bacon and hams, 44,373 and 675,785 lbs.; beef and pork, 2,544 and 19,766 barrels; beer and ale, 421,697 and 1,292,701 gallons; books, £4,699 and £12,791; butter, 74,090 and 338,775 lbs.; cabinet and upholstery ware, £4,026 and £16,186; coffee, 183,803 and 469,457 lbs.; copper (sheet and old), 41,581 and 358,788 lbs.; cordage, 3,642 and 10,103 cwt.; corn and wheat, 101,283 and 224,021 bushels; other grain, 21,161 and 76,276 bushels; wheat and flour, 3,672 and 21,882 bushels; cotton manufactures, £61,196 and £142,150 (in 1839, £230,775); earthenware, £6,820 and £20,179; fruit, of all sorts, £2,597 and £16,356; glass manufactures, £36,822 and £63,425; haberdashery, £22,510 and 66,713; hardware and cutlery, £18,253 and £79,970; hats, £12,777 and £23,245; hops, 10,332 and 126,696 lbs.; unwrought iron, 2,758,560 and 8,593,618 lbs.; wrought iron, £20,235 and 67,943; lead and shot, 315,590 and 1,104,609 lbs.; leather manufactures, £7,216 and £32,593; linen manufactures, £29,454 and £66,955; machinery, *nil* and £8,493; medicines, £708 and £17,230; cocoa-nut oil, *nil* and 14,606 gallons; painters' colours, £7,223 and £15,545; pickles and sauces, £7,223 and £15,545; rice, 859,060 and 7,517,716 lbs.; saddlery, £5,314 and £22,417; salt, 76,278 and 154,322 bushels; silk manufactures, £21,927 and £44,590; soap, 399,754 and 2,656,780 lbs.; spirits of all sorts, 327,990 and 627,476 gallons; stationery, £11,755 and £36,744; raw sugar, 5,176,730 and 11,269,856 lbs.; refined sugar, 411,391 and 1,039,078 lbs.; tea, 1,311,357 and 1,189,100 lbs.; tobacco, £13,194 and £78,340; wine, of all sorts, 313,427 and 494,285 gallons; woollen manufactures, £33,348 and £111,979. Aggregate value of imports, £976,091 and £2,548,775; aggregate value of exports, £675,226 and £1,289,036. Sheep's wool, 3,908,177 and 9,541,474 lbs.; tallow, 12,026 and 48,874 lbs.; number of sheep and swine, 2,154 and 24,153; number of neat cattle, 225 and 3,365.

Although the aggregate value of the imports exceeded that of the exports, yet there was a large increase not only of the staple products of the colony, but also of many imported articles, which passed through New South Wales as a *dépôt in transitu* to other surrounding countries. I do not know a similar rapid increase of commercial prosperity in any other country, and but for the injurious imperial legislation and orders from England, this wonderful prosperity would most probably have remained unchecked, and England would have participated in the welfare of its distant dependency.

The return of articles imported into the Sydney district alone (exclusive of Port Phillip) during the year 1847, gives the estimated value in the colony at £1,544,327, and for 1848 £1,182,874. An enumeration of some of the principal articles imported from Great Britain during the year 1848

will give a good idea of the importance of a colonial trade to England; how it enters into various branches of manufactures, and how the consumption of goods made at home fosters and promotes a taste, which must increase, and which materially tends to create a preference for English over foreign goods. During the year 1848, 117 *distinct articles* were imported into Sydney from Great Britain; I select from the list before me a few of the leading articles, shewing the quantities imported. Excepting sugar, 9,988 tons, and tea 2,108,916 lbs. (value £71,353 and £26,142,) nearly every other article was from the United Kingdom.

Quantity and Value of some of the Articles of British Produce imported into the Sydney District during the year 1848.—Alkali (soda), 3,325 cwt., £2,188; apparel and slops, 1,507 bales, £55,510; ammunition—gunpowder, 34,466 lbs., £1,295; shot, 964 cwt., £1,009; bags and sacks, 376 bales, £4,205; beer and ale, 475,433 gallons, £54,804; blacking, 331 casks, £892; blankets and counterpanes, 150 bales, £5,661; brushware, 141 packages, £2,312; canvas, 466 bales, £7,867; carpeting, 118, £2,648; carriages and carriage materials, 67 packages, £1,652; painters' colours, 4,001 kegs, £4,883; copper, 2,341 cwt., £10,058; cordage and rope, 3,835, £3,674; corks and bungs, 271 bales, £1,305; cottons, 1,696, £64,919; drugs and medicines, 1,369 cases, £9,594; earthenware and china, 1,090 crates, £10,284; salt fish, 833 barrels, £1,632; furniture, 928 packages, £3,258; glass and glassware, 3,685, £8,502; grindery, 86 casks, £1,566; haberdashery, 1,527 cases, £73,597; hardware and ironmongery, 7,800 packages, £65,029; hats, caps, and bonnets, 365 cases, £6,730; hops, 925 pockets, £3,703; horse hair, 56 casks, £1,248; hosiery and gloves, 262 cases, £11,829; musical instruments, 101 cases, £3,708; iron and steel, 2,451 tons, £22,533; jewellery, 32 cases, £2,529; lead, 165 tons, £3,022; unmanufactured leather, 32 cases, £1,230; boots and shoes, 624 trunks, £13,529; linens, 1,567 cases, £50,272; lucifer matches, 99 cases, £975; machinery, 99 packages, £1,484; malt, 3,511 casks, £2,245; millinery, 93 cases, £3,833; iron nails, 2,253 kegs, £3,188; copper nails, 652, £1,821; oil cloth, 20 cases, £257; oilman's stores, 9,644 packages, £28,927; perfumery, 100 cases, £1,291; tobacco pipes, 2,408 boxes, £2,454; pictures and paintings, 41 cases, £1,256; pitch, tar, and resin, 1,957 barrels, £878; plate and plated ware, 28 cases, £1,284; saddlery and harness, 197 cases, £6,368; salt, 3,715 tons, £9,403; ship chandlery, 68 packages, £666; shooks and staves, 13,404 bundles, £133; silks, 131 cases, £12,348; number of slates, 41,000, £170; spirits—brandy, 118,819 gallons, £28,316; rum, 223,706, £26,406; gin, 42,669, £8,954; whisky, 9,480, £2,425; liqueures, 1,212, £403; starch and blue, 499 cases, £1,176; stationery and books, 1,891 cases, &c., £33,156; tin and tinware, 1,296 boxes, £2,456; tobacco, cigars, and snuff, 572,406 lbs., £10,968; toys and turnery, 243 cases, £3,315; turpentine and varnish, 2,406 gallons, £371; twine and thread, 98 packages, £1,542; umbrellas and parasols, 22 cases, £1,203; vinegar, 21,946 gallons, £1,368; watches and clocks, 81 cases, £415; wine, 302,741 gallons, £37,918; woollens, 1,508 bales, &c., £57,365; woolpacks and bagging, 471 bales, £8,350; zinc, 910 cwt., £228. [For present imports, see Supplement.]

The principal exports for 1848, from Sydney alone, were—wool 12,445,048 lbs., value £683,628; woollen manufactures (Tweeds), 59 packages, value £1,468; tallow, 3,565 tons, £102,611; horses, 1,181, £14,137; horned cattle, 10,208, £16,457; sheep, 25,331, £8,737 (about 6s. 10d. per sheep); sperm oil, 1,186 tuns, £64,230; black whale oil, 196 tuns, £3,177; whalebone, 11 tons 2 cwt., £1,385; skins of neat cattle, 1,308 tons, £17,498; soap, 121 tons, £2,716; cedar, 863,307 feet, £5,133; leather, unmanufactured, 108 tons, £5,702; maize, 27,058 bushels, £3,063; butter and cheese, 81 tons 9 cwt., £2,836; tallow candles, 69,804 lbs., £1,117; coals and coke, 6,266 tons, £2,980; carts and waggons, 244, £2,010. Of the total exports nearly 1,000,000 sterling (£963,590) consist solely of the produce of the colony: out of £1,155,009, total exports, the amount sent to Great Britain was £901,869, to New Zealand £163,938, and to other British possessions £78,210.

There are other ports in the Sydney district which are now commencing a direct trade with England and other places. The

exports from the port of Newcastle in 1847 were valued at £14,112, and included 2,450 tons of coals, value £884, or 7s. 2d. per ton; 3,484 sheep, 379 horned cattle, 58 horses, 2,000 lbs. of flour, 102 bushels of barley, 2,748 lbs. of maize, ten and a half tons of hay, and other articles were all sent to New Zealand. To England were sent from this new port in the same year—wool 169,611 lbs., value £9,435; tallow, 30,428 lbs., value £600; The trade of Melbourne will be given when describing Port Phillip.

The ports of Australia, Van Diemen's Island, and New Zealand, are favourably situated for carrying on the whale fishery in the southern hemisphere. Since 1845 whalers have been exempted from port charges in Sydney harbour, and the following is a return of the ships and vessels engaged in the fisheries that have visited Port Jackson during the last five years; distinguishing those that are colonial, British, or foreign, with the tonnage of each description, and the estimated value of the cargoes disposed of by the last-mentioned class for payment for repairs, refitting, and refreshment:—

Year	Colonial Vessels.		British Vessels.		Foreign Vessels.		Description and Value of Cargo disposed of by Foreign Ships.			
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Sperm Oil.	Black Oil.	Whalebone.	Value.
1844	13	3,052	3	1,219	12	3,617	Tuns. 122	Tuns. 152	Cwt. 33	£4,993
1845	15	3,444	7	2,685	15	5,345	37	122	147	4,269
1846	16	3,894	9	2,287	55	18,147	203	30	129	6,981
1847	23	5,345	4	1,137	43	13,866	368	192	673	15,804
1848	26	613	1	267	37	11,203	158	8 $\frac{3}{4}$	5	4,840

The whale and seal fisheries of New South Wales have of late years diminished; the whale is very migratory, and seems to have endeavoured to elude his persevering pursuers by taking refuge in the Northern Pacific,

where, for the last few years, the fish have been found in great numbers on the coasts of Japan and near Saghalien. The value of the New South Wales fisheries is thus shewn for eighteen years:—

Year.	Sperm Whale.	Black Whale.	Whalebone.		Seal Skins.	Value.
	Tuns.	Tuns.	Tons.	Cwt.	Quantity.	
1828	348	50	—	—	7,647 in number	—
1829	885	—	—	—	12,350 "	£94,101
1830	1,282	518	—	—	5,460 "	115,780
1831	1,914	1,004	—	—	4,972 "	—
1833	3,183	420	—	—	2,465 "	169,278
1836	1,700	1,178	—	—	386 "	126,085
1837	2,559	1,565	77	—	107 "	183,122
1838	1,891	3,055	174	—	3 cases . . .	197,644
1839	1,578	1,229	134	14	7 " . . .	172,315
1840	1,854	4,297	250	—	474 in number	224,144
1841	1,545	1,018	84	13	41 "	127,470
1842	957	1,171	60	5	162 "	77,012
1843	1,115	190	22	8	155 "	72,989
1844	810	526	15	18	3 bales . . .	57,493
1845	1,352	571	21	13	2 casks, 10 Skins	96,804
1846	1,064	344	17	9	—	70,126
1847	1,214	331	8	3 $\frac{3}{4}$	—	80,528
1848	1,186	196	11	2	4 cases . . .	68,969

The number of ships engaged in the whale fishery in 1848, in connection with New South Wales, was 64; viz., 37 foreign; 3 British; 24 colonial: and the produce—sperm oil, 1,274 tons, value £67,005; black oil, 389 tons, £9,180; whalebone, 306 tons, £1,472. Total value — £77,652. At Port Phillip there were four boats engaged, which collected $15\frac{1}{2}$ tons of oil, value £235; whalebone, 6 tons 6 cwt.

The increase of the shipping entering the ports of New South Wales has been very great since 1828:—

Year.	Number.	Tons.
1828	137	32,559
1829	158	37,342
1830	157	31,225
1831	155	34,000
1832	189	36,020
1833	210	50,144
1834	245	58,532
1835	266	63,019
1836	269	65,415
1837	400	80,114
1838	428	91,777
1839	560	135,474
1840	709	178,958
1841	714	183,778
1842	628	143,921
1843	558	110,864
1844	417	87,539
1845	597	105,352
1846	767	141,467
1847	878	154,904
1848	996	199,304

In twenty years the number of ships increased seven-fold, and the tonnage six-fold. Since 1848 the shipping and trade of the colony have been very largely augmented.

[The returns since 1848 will be found in the Supplement.]

The number and tonnage of vessels built and registered in the colony have been:—

Year.	Vessels Built.		Vessels Registered.	
	Number.	Tons.	Number.	Tons.
1834	9	376	19	1,852
1835	7	303	21	2,267
1836	9	301	39	4,560
1837	17	760	36	3,602
1838	20	808	41	6,329
1839	12	773	79	10,862
1840	18	1,207	98	12,426
1841	35	2,074	110	11,250
1842	26	1,357	89	9,948
1843	47	1,433	92	7,022
1844	18	519	87	8,087
1845	18	1,042	98	9,376
1846	28	1,032	83	4,895
1847	36	2,284	104	9,428
1848	28	1,561	103	7,584

The numbers respectively built and registered during 1848 in the Sydney and Port Phillip districts, were—

District.	Ships Built.		Registered.		
	No.	Tons.	No.	Tons.	Men.
Sydney . . .	26	1,281	87	6,618	336
Port Phillip .	2	280	16	966	80
Total .	28	1,561	103	7,584	416

I have now recounted the rise and progress up to the year 1848, of the trade and staple products of New South Wales; that trade is again in a healthy state, and from the large quantity of shipping to which it gives employment, in voyages occupying nearly a year, out and home, a skilful and hardy race of seamen are trained, well adapted for service on any emergency necessary for the national defences.

CHAPTER V.

GOVERNMENT OF NEW SOUTH WALES—PROGRESSIVE GRANT OF FREE INSTITUTIONS—EXAMINATION OF PROPOSED NEW CONSTITUTION—AND LAWS IN FORCE IN THE COLONY.

THE government of New South Wales was founded by an order in council, dated 6th December, 1786. By that order, and by the king's warrant, dated 3rd April, 1787, for issuing letters patent, to appoint a vice-admiral, and a judge of the vice-admiralty court for the new settlement, its limits were declared to extend "from the Northern Cape, or extremity of the coast called Cape

York, in the latitude of $10^{\circ}37'S.$, to the South Cape; the southern extremity of the coast, in the latitude of $43^{\circ}39'S.$, and inland to the westward, as far as $135^{\circ}E.$ long., including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid." Norfolk Island was included within the limits of the boundary marked out by the order in council. It was not then known that Van Diemen's

Land was an island; and it continued subject to New South Wales until an order in council, dated 14th June, 1825, declared Van Diemen's Land independent of New South Wales, by which Bass' Straits became the southern limit of the colony.

By the commission issued to captain Phillip, the first governor appointed by the crown in 1787, full power was given him to pardon all malefactors sentenced to death by the court of criminal jurisdiction, which consisted of a judge-advocate, (captain Collins), and *six* officers of the sea and land service, acting under a precept issued by the governor. No offender could suffer death unless five members of the court agreed in the award. The governor was fully empowered to make laws for the good government of the colony. The act 27 Geo. III., c. 2, only authorized his Majesty to establish a court of criminal jurisdiction; but, by an order in council, a civil court was formed, consisting of the judge-advocate, and two inhabitants appointed by the governor, who were to hear and determine, in a summary way, all pleas of lands, houses, debts, contracts, and all personal pleas whatsoever.* This civil court could examine witnesses on oath, issue executions under the hand of the judge-advocate, and grant probates of wills and administration of the personal estates of testates dying within the colony. An appeal lay from this court to the governor, and from him to the Privy Council if the thing in demand exceeded the value of £500.

For several years, the administration of government and of justice was despotic and imperfect. Shortly after the foundation of the settlement, several convicts stated that the period of their sentence to transportation had been completed, but it was found impossible to ascertain if their statements were true, as the important documents concerning the crimes and sentences of the prisoners had never been sent from England. So little were even the formalities of jurisprudence preserved, that the judge, after hearing the evidence against a criminal, used to retire with the military jury to deliberate upon the verdict in an adjoining room. It was only on the suggestion of Mr. Bigge, when commissioner of inquiry, that judge-advocate Wylde charged the members of the court in the presence of the prisoner. The first governors paid little attention to the law court, whose chief, in return, was not very particular in registering the various

orders and proclamations issued, from time to time, by the governors, or very strenuous in requiring them to be obeyed. Governor Bligh not unfrequently took the administration of the criminal law into his own hands, and punished whom he chose.

Governor Macquarie, of whom Mr. Wentworth thus speaks—"never was there a more humane and upright man"—also caused "three freemen, two convicts, and two women" to be seized for trespassing on a particular spot: he ordered, without any hearing, both freemen and convicts to be flogged with twenty-five to thirty lashes each, and the women to be imprisoned for forty-eight hours. These and other proceedings led to an investigation of the state of the colony under the authority of a royal commission, and the exertions of Mr. Wentworth, a lawyer of much popularity at Sydney, and author of an interesting work on N.S. Wales and Van Diemen's Land in 1819, prepared the way for a change in the administration of the government and of justice.

On the 13th of October, 1823, his Majesty, under the authority of an act of parliament (4 Geo. IV. c. 96), issued letters patent constituting a supreme court with cognizance of all pleas, civil, criminal, or mixed, and jurisdiction in all cases whatsoever in New South Wales and its dependencies, after the manner of his Majesty's courts of King's Bench, Common Pleas, and Exchequer at Westminster.

In 1823-4, the first step in the progress of free institutions was made (under the provisions of the act 4 Geo. IV., c. 96), by appointing a council to aid the governor; this council was formed of the officer in command of the troops, the archdeacon, the colonial secretary, the treasurer, and attorney-general.

In 1823, an act of Parliament (the 9 Geo. IV., c. 83, s. 20) declared it to be inexpedient to call a Legislative Assembly for the colony, and in lieu of one, provided that it should be lawful for his Majesty under the sign manual to constitute and appoint a council of such persons resident in the colony not exceeding fifteen, nor less than ten, as his Majesty might be pleased to nominate and appoint.

Under the authority of this act of the Imperial Legislature, the governor, with the concurrence of at least two-thirds of the members, might make laws for the colony, if not repugnant to the act 9 Geo. IV. c. 83, or to the charter, or letters patent, or orders

* See Clarke on *Colonial Law*. London: 1834.

in council, or to the laws of England. The governor to have the initiative in the introduction of all laws to be submitted to discussion in the council, provided he gave eight clear days' notice in the public journals, or by public advertisement (should there be no journals), of the general objects of the act proposed to be brought under consideration, unless in case of emergency, when such notice might be dispensed with.

Any member of the council might request the governor to introduce a bill for the consideration of the council. If the governor declined, he was bound to lay his reasons in writing, together with a copy of the bill, before the council, and any member, disapproving of such refusal, might enter upon the minutes the grounds of his disapprobation. If a majority of the members dissented from any bill, and entered the grounds of their dissent on the minutes of council, the bill could not become law. Every bill passed by the council was to be transmitted within seven days to the supreme court, to be enrolled, and after fourteen days from the date of such enrolment, it came into operation. If the judges represented that such bill was repugnant to statutes or other public deeds before cited, it was again brought under the consideration of the council, and if again passed, proceeded into operation, until the pleasure of his Majesty were known, to whom were to be transmitted the opinions of the judges, &c. The votes and proceedings of the Legislative Council were to be officially published in the newspapers. The governor and council had the power of imposing taxes for local purposes. By 3 Geo. IV., c. 96, continued by 9 Geo. IV., c. 83, s. 26, the governor was authorized to impose, on importation into the colony, duties not exceeding 10s. a gallon on British or West India spirits, and 15s. on all other spirits: not exceeding 4s. per lb. on tobacco, nor 15s. per cent. upon goods, wares, &c., not being the growth, produce, or manufacture of the United Kingdom; and, by 9 Geo. IV., c. 83, s. 26, the governor was also empowered to levy a duty upon colonial spirits, not exceeding that levied on imported spirits.

In 1842, (30th July), under the act 5 & 6 Victoria, c. 76, a Legislative Council of thirty-six members was created, of whom one-third was nominated by the crown, and two-thirds elected by the colonists, on whom an elective franchise was conferred, namely, an estate of freehold in possession in lands

or tenements, situate within the district for which such franchise is to be exercised, of the clear value of £200 sterling at the least, above all charges and incumbrances in any way affecting the same, or a householder within such district, occupying a dwelling-house of the clear annual value of £20 sterling money at the least. No person was thus qualified to vote unless he had arrived at the full age of twenty-one years, a natural born or naturalized subject of the queen; and if he had been attainted or convicted of treason, felony, or infamous offence, within her Majesty's dominions, unless he had received a free pardon, or one conditional on not leaving the colony, or had undergone the sentence or punishment to which he had been adjudged for such offence. Voters to be qualified must have been in possession of estate, or occupancy of house, at least six calendar months before the date of writ for election, and have paid up all rates and taxes payable by him as owner, in respect of such estate or house, which shall have become payable during three calendar months next before election or registration. The qualification of elective members of council was fixed at a legal and equitable seizure of an estate of freehold, for his own use and benefit, in lands and tenements in New South Wales, of the yearly value of £100 sterling, or of the value of £2,000 sterling, above all charges and incumbrances affecting the same. Under this act, the legislature then in operation was authorized to make all necessary provisions for dividing the colony into convenient electoral districts; for issuing, executing, and returning the necessary writs for such elections; for determining the validity of disputed returns, and other such matters: but it was provided, that the district of Port Phillip should be formed by a straight line drawn from Cape Howe to the nearest source of the river Murray, and thence along the course of that river to the eastern boundary of the province of South Australia. This district of Port Phillip was to return at least five members; the town of Melbourne, in Port Phillip, one; and Sydney, New South Wales, two members. The Legislative Council, when constituted, had power given them to increase the number of the members of their body, and to alter the districts and electoral divisions, provided the proportion of one-third members of the council, to be nominated by her Majesty, be preserved. Not more than half the number of non-elective mem-

bers of the Legislative Council, appointed by the crown, were to hold any office of emolument under the crown in New South Wales. The non-elective members to hold their seats for five years from the date of appointment, or until the council, be dissolved. Non-attendance for two successive sessions, bankruptcy, insolvency, being a public defaulter, conviction of treason or felony, becoming a subject or citizen of any foreign power or powers, or being *non compos mentis* (of unsound mind), would be causes for declaring a seat in the Legislative Council vacant. The governor and Legislative Council were, by this act, authorized to make laws for the peace, welfare, and good government of the colony, provided such enactments were not repugnant to the laws of England, and did not interfere in any manner with the sale or other appropriation of the lands belonging to the crown in the said colony, or with the revenues thence arising. The governor might propose laws to the council; or amend the bills passed by the council, when presented to him for her Majesty's assent; and the council might, in like manner, return any bill in which the governor shall have made any amendments, with a message, signifying those of the amendments to which they agreed, and those to which they disagreed; and thereupon the bill was to be taken and presented for her Majesty's assent, with the amendments so agreed to. The governor might, in her Majesty's name, give an assent to bills passed by the council, or he might withhold it, reserving such bill for the signification of her Majesty's pleasure thereon; and all bills affecting the salaries of the governor, superintendent of Port Phillip, or the judges, or bills altering or affecting the duties of customs upon any goods, wares, or merchandise, or altering the constitution of the Legislative Council, shall, in any case, be so reserved, except temporary bills, which may be assented to by the governor, by reason of some public and pressing emergency. All bills assented to by the governor, to be transmitted to one of her Majesty's secretaries of state; and the queen may, by her Majesty's order in council, within any time during two years after the receipt of the said bill, declare her disallowance of it. The taxes, duties, rates, and imposts levied in the colony, were declared to be appropriated to the public service within the colony, by ordinances to be enacted by the governor, with the advice and consent of the Legislative Council. pro-

vided the governor should have first recommended to the council to make provision for such public service, towards which such money is appropriated, and subject to the fixed annual payment of the sums mentioned in the following schedule:—

Governor	£5,000
Superintendent at Port Phillip	1,500
Chief Justice	2,000
Three Puisne Judges	4,500
Salaries of the Attorney and Solicitor-General, Crown Solicitors, and contingent and miscellaneous expenses of administration of justice throughout the colony	20,000
Colonial Secretary and his department	7,000
Colonial Treasurer and his department	5,000
Auditor-General and his department	3,000
Salary of Clerk, and miscellaneous expenses of Executive Council	600
Pensions	3,000
Public Worship	30,000

These sums might be varied, or altered, and any saving accruing thereby, might be appropriated to such purposes connected with the administration of the government of the colony as to his Majesty might seem fit.

By clause XLI. of this act, provision was made for the local government of different parts of the colony, by empowering the governor to issue letters patent under the great seal of the colony of New South Wales, to incorporate the inhabitants of every county within the colony, or of such parts of counties or other divisions as to him shall seem fit, to form districts for the purposes of this act; to constitute in each district of not less than 7,000 souls, an elective council of not more than nine members; if the district have 7,000 to 10,000 souls not more than twelve councillors, and so on in proportion to the number of souls, the maximum being twenty-one councillors to 20,000 souls. The district councillors to be persons qualified to be elected as members of the Legislative Council; and the district electors to be persons qualified to vote in the election of members of the Legislative Council in the district in which the election is made. If district councillors were not elected by the people, the governor might appoint them. No district councillor to continue in office more than three years, unless re-elected; or to hold any lucrative office under such district council, or to enter into any contract, or have pecuniary dealings with such district council, under certain penalties. The district council to be presided over by a warden, appointed and removable by her Majesty or by the governor; a competent district surveyor to be appointed, and to be removable by

council, subject to approval of governor; the said surveyor to superintend the construction of roads, public works, &c. The district councils to raise, assess, levy, and appropriate money in their respective districts for making roads, streets, bridges, constructing or repairing public buildings, establishing and supporting schools, defraying the expenses of, or connected with, the administration of justice and police within the district; and to direct and control other matters which may be specially subjected to the control of the said district councils, by any law of the governor and Legislative Council of the colony. No fine or penalty to be imposed by the district councils exceeding £10 sterling. No tax to be levied on property belonging to the crown; and copies of all bye-laws to be laid before the governor for his assent, and might be disallowed by him within two calendar months after the receipt of said copies. By clause 47 of this act, 5 & 6 Victoria, it was enacted that one-half of the expense of the police establishment of the colony (exclusive of the convict establishment) should be defrayed out of the general revenue arising from taxes, duties, rates, and imposts levied within the colony, and *the other half to be defrayed by assessment upon the several districts of the colony, in such proportion as should be, from time to time, fixed by the governor and Legislative Council.* The amount so fixed to be paid by the treasurers of the several district councils according to the warrants of the governor, to whomsoever he may appoint; and if the treasurers had not sufficient money in hand, the district council must levy a fair and equal rate upon all property within the district; and if this be not done, a power of distress and sale might be issued by the governor on the goods of the district treasurer, members of the said district council, or inhabitants of the district.

The foregoing are the leading points in the act 5 & 6 Vict., c. 76. Under it the Legislative Council was established, and now holds its annual sittings; and Sydney and Melbourne were created corporations by charter: they have each a mayor and court of aldermen, who have exercised beneficially the duties entrusted to them, and contributed to the welfare of the inhabitants of each city. Soon after the act 5 & 6 Vict. came into operation, the then governor, Sir G. Gipps, proceeded to issue

charters for the establishment of twenty-nine district councils, choosing for the boundaries the police divisions rather than those of the counties; over each district council a warden was appointed, and district councillors were selected from the most influential and respectable persons resident in each district. The following is a return, issued from the surveyor-general's office, dated July 31, 1844, showing the number of acres contained in each district, for which a district council is provided, and the extent of the land alienated by the crown, in each respectively:—

District.	Alienated.	Unalienated.	Total.
NEW SOUTH WALES:—			
Macquarie	Acres. 116,672	Acres. 2,395,321	Acres. 2,512,000
Raymond Terrace and } Dungog	331,159	1,620,728	1,951,887
Paterson	168,283	104,960	273,243
Maitland	145,318	108,682	254,000
Patrick's Plains	251,784	151,500	403,284
Merton and Muswell- } brook	149,818	542,080	691,898
Scone and Murrurundi	237,885	841,600	1,079,485
Cassilis	283,051	1,198,000	1,481,051
Mudgee and Wellington	244,787	2,035,135	2,279,922
Wolombi and M'Donald	97,173	958,827	1,056,000
Newcastle	35,868	76,160	112,028
Brisbane Water	57,054	300,800	357,854
Sydney	58,102	82,631	140,733
Paramatta	87,169	63,936	151,105
Windsor	92,059	429,630	521,689
Penrith	129,191	247,898	377,089
Liverpool	64,008	39,900	103,908
Appin and Campbell- } town	51,361	82,603	133,964
Camden, Narellan, and } Pictou	129,386	340,000	469,386
Hartley	80,647	1,279,882	1,360,529
Bathurst and Carcor	715,236	2,719,858	3,435,094
Yass	146,387	965,099	1,111,486
Goulbourn	590,714	955,920	1,546,634
Berrima	90,169	360,676	450,845
Illawarra	137,917	432,640	570,557
Braidwood and Broulee	262,060	1,399,133	1,661,193
Queanbeyan	403,201	806,402	1,209,603
PORT PHILLIP:—			
Bourke	156,640	5,027,360	5,184,000
Grant	59,854	5,412,146	5,472,000

In October, 1843, the Legislative Council passed a resolution, that it was highly inexpedient, even if possible, to cast any portion of the police expenditure on the country districts, and that this expenditure ought to be defrayed, as hitherto, out of the general revenue. The same course was adopted the ensuing year; and the governor found himself unable to carry out the intentions of the act 5 & 6 Vict., by the unwillingness of the colonists to become members of the district councils. Mr. Deas Thompson, the

experienced secretary to the government of New South Wales, in a useful analysis of the proceedings relative to the district councils, dated 27th March, 1847, says—

“It may not be altogether irrelevant now to inquire how far the establishment of municipal institutions in the country districts has been favourably received by the inhabitants. If we may judge by the result of the elections in the different districts, the possession of this privilege is looked upon, at least in a great many of them, with much indifference—an indifference which appears to have annually increased since their first establishment. The following summary, showing the number of members elected, and nominated by the governor in default of election, to fill the annual vacancies of one-third, under the charter, will sufficiently illustrate the truth of this conclusion: viz.—

1844 . . . elected, 67 : nominated, 0 = 67.
 1845 . . . elected, 51 : nominated, 14 = 65.
 1846 . . . elected, 38 : nominated, 32 = 70.

“Thus, during the three years in question, there were 156 persons elected, and forty-six nominated by the governor. It is also undoubted, that of those elected, a considerable proportion did not consist of the persons most eligible for so important a trust, a great disinclination being understood to prevail amongst many highly respectable persons to accept the office. It appears that (with the solitary exception of the sum of £170, raised by the district council of Grant) in none of the districts was any revenue whatever raised by assessment. In several, debts have been incurred in payment of the salaries of the officers appointed by the council; but the refusal of the Legislative Council to grant the additional facilities necessary to enable these bodies to levy the assessments when made, and the strong opinions expressed in debate of the risk which would attend their enforcement, seem to have entirely paralyzed the endeavours of the several district councils to exercise their legitimate powers.”

Paramatta was almost the only exception to the total inactivity which characterized the district councils. The Legislative Council would lend no assistance to the executive government in giving effect to this part of the constitution of the colony; and, reasoning from a connected series of facts on the subject, Mr. Thompson thus recapitulates the conclusions at which he arrived:—

“1st. That district councils have, from the causes mentioned, entirely failed to answer the object contemplated in their establishment.

“2nd. That there is at present only one in active operation, and this one is sustained only by contributions from the government, and not by assessment raised under the powers granted to it under the act.

“3rd. That these institutions, in their present form, are not adapted to the state of society in this colony.

“4th. That so far as the Legislative Council or the public at large is concerned, they are not regarded in any favourable light.

“Such are the general conclusions at which I am forced to arrive, from a full consideration of all the circumstances I have detailed. I am by no means prepared to say, however, that, with considerable

modification, they may not be adapted to the peculiar circumstances of the colony; but this can only be done by leaving all legislation on the subject to the local legislature. No doubt, as has been experienced in other colonies, there may be an indisposition on the part of the Supreme Legislature to grant to any other bodies concurrent powers of taxation; but for mere local purposes it is scarcely to be apprehended that this would be refused, especially when it would have the effect of relieving the general treasury from heavy burdens, which it can ill afford to bear.”

In the Port Phillip division of the colony district councils were established in the counties or districts of Bourke and Grant. Mr. Latrobe, the superintendent of Port Phillip, stated, in September, 1846, that they had then been in existence four years; but it was not in his power “to point out a single instance or particular, in either case, in which the object of these establishments had been attained. There has not (he says) been one road made or repaired under their charter; not one school established; not one public building erected; and not one farthing raised or applied to the support of a district police, or to the administration of justice.”

This summary of the principal facts connected with the district councils, will enable the reader to understand better the necessity of a new constitution for New South Wales, and the basis on which it was subsequently proposed to found it. Previous to proceeding chronologically with the legislative history of the colony, it should be remarked, that the Legislative Council of two-thirds elective, and one-third nominated members, as provided by the act 5 & 6 Vict., had worked well, and passed several useful colonial laws. The distribution of the elective franchise was (according to Mr. Braim), in 1844, when the population was 130,856, as follows:—

District.	Number of Electors.	Number of Members returned.
Sydney	2,823	2
Cumberland, County .	1,344	2
Camden	386	1
Northumberland . . .	369	1
Durham	345	1
Melbourne	591	1
	5,858	8
Eleven other Districts	2,619	16
Total	8,477	24

A committee of the Legislative Council in New South Wales recommended that leaseholders of and at a rental of £20 per an-

num, or squatters possessed of 200 cattle or 1,000 sheep, should have a vote. During the last four years, the attention of her Majesty's government has been specially directed to a consideration of the governmental state of the Australian colonies, and to the granting of representative assemblies to these settlements.

On the 31st July, 1847, Earl Grey, her Majesty's secretary of state for the colonies, addressed an able despatch to Sir Charles Fitzroy, governor of New South Wales, in which his lordship stated, that her Majesty's government adopting, in general, the reasonings of Sir G. Gipps (the late governor of New South Wales), and of the majority of the executive council, had submitted to the queen their opinion, that Parliament should be recommended to impart to her Majesty the authority necessary for carrying into effect the separation of the Port Phillip district from the rest of the colony of New South Wales. Earl Grey, in expressing his own conclusion for the separation of Port Phillip from New South Wales, remarks, that it rested mainly on the principle, that all affairs of merely local concern should be left to the regulation of the local authorities; and proceeds to state, that if local self-government is necessary for the good of the whole colony, it is not less necessary for the good of the several districts of which it is composed; and his lordship adds—

“For this reason it was that Parliament provided for the erection, throughout New South Wales, of municipal corporations, which should, in various respects, balance and keep in check the powers of the Legislative Council. By this method it was supposed that the more remote districts would be able to exercise their fair share of power, and to enjoy their proper influence in the general polity of the whole province. But the result has disappointed this expectation. The municipalities have only a nominal existence. The Legislative Council has absorbed all the other powers of the colonial state. The principle of self-government in the districts the most remote from Sydney is therefore acted upon almost as imperfectly as if the conduct of local affairs had remained under the same management and institutions as those which the existing system superseded.”

The secretary of state then announces the intention of her Majesty's government to propose to Parliament some changes in the existing constitution of New South Wales, consequent on the separation of the Port Phillip district. In indicating the general principles on which it was proposed to legislate, Earl Grey stated, that in revising the constitution of New South Wales, her Majesty's government was still favourable

to the creation of local authorities, such as the district councils, especially with a view to their “being made to bear to the House of Assembly the relation of constituents and representatives.” The despatch however, on this point, is vague and inconclusive. Earl Grey, indeed, expressed his desire to be relieved of the responsibility of proposing such a change, by obtaining “the most complete local intelligence, supported by the most eminent local authorities.” In one paragraph in this despatch, his lordship expresses a decided feeling in favour of the establishment of two distinct houses of legislation:—

“You are aware that, in the older British colonies, the legislature, as in New South Wales, is generally composed partly of nominees of the crown, and partly of the representatives of the people; but there is this important difference between the two systems—that in the one case the legislature is divided into two separate houses and chambers; in the other, the representatives of the people and the nominees of the crown form a single body, under the title of the Legislative Council. It does not appear to me that the practical working of this last system would by any means justify the conclusion, that it is an improvement upon that which it was formerly the practice to adopt; on the contrary, *I see many reasons for belief, that the more ancient system, by which every new law was submitted to the separate consideration of two distinct houses, and required their joint consent for its enactment, was the best calculated to insure judicious and prudent legislation.*”

Finally, the secretary of state concludes with the following sentiment, worthy of his lordship's high station:—“I need scarcely add, that it will be a source of the highest gratification to me, if, under the authority of Parliament, the colonial governments of Australia can be settled on a basis on which the colonists may, under the blessing of Divine Providence, themselves erect institutions worthy of the empire to which they belong, and of the people from whom they are descended.”

On the receipt of this despatch, of July 31, 1847, in New South Wales, the governor, Sir Charles Fitzroy, caused it to be printed for general circulation; a storm of opposition was immediately created against the proposition of perpetuating the district councils, and of delegating to them the right of electing representatives to legislate for the colony.

The colonists considered that it would be utterly impossible ever to bring those councils into effective operation; that the power and authority with which they were invested would centre in the governor; that they would be virtually deprived of the existing

elective franchise; that there were to be two legislative houses—one appointed by the crown, and dependent only on the government—the other subservient only to the district councils, by whom its members would be elected—so that neither house would be independent; and that the making their colony the subject of a theoretical experiment in legislation was a measure of which they could never admit the policy or justice. But there was nothing in the despatch of Earl Grey, expressed or implied, to justify the violent language used at some of the public meetings in the colony; and from no previous colonial minister had the colonists met with a larger concession to liberal principles; the fault—if I may use the term—lay in the indefinite wording of the despatch, and the absence of any determined line of policy on the part of her Majesty's government.

Among the documents emanating from the colonists, on this occasion, was a petition from the magistrates, landholders, and residents in the district of Picton, county Camden (New South Wales), to the governor, Sir Charles Fitzroy, and forwarded by his excellency to Earl Grey, March 27, 1848 (received August 7, 1848), which sets forth the objections to the then proposed alteration in the constitution of New South Wales:—

“Your petitioners have learned, with much regret and dissatisfaction, that it is the intention of her Majesty's government to alter the present constitution of the colony, and substitute in its stead a form of representation totally at variance with all their ideas of liberty, and utterly repugnant to every British colonist.

“Your petitioners would respectfully point to their own district, in order to show that it will be impossible to carry out such a scheme as is detailed in the despatch of Earl Grey to your excellency. The district contains an area of nearly 600 square miles, and the population only numbers 1,200, according to the last census; while there is but one village in the whole district, containing about 120 persons, and distant only fifty miles from Sydney. By the last electoral list there appears to be sixty-eight voters, but the number would be considerably increased if the franchise was extended to leaseholders.

“Your petitioners would also beg to remark, that not only would it be impossible to establish district councils in any shape, but at present there is even a difficulty in finding properly-qualified persons to act as local magistrates; and your petitioners believe that there are other districts similarly situated in the colony.

“Your petitioners would particularly call the attention of your excellency to that part of the despatch where it is admitted that ‘the intention of Parliament to create local authorities (district councils) has hitherto been defeated;’ but the fact of such a dan-

gerous and iniquitous power being given to any government officer, as detailed in clause 49 of the present Constitutional Act, (5 & 6 Vict., c. 76), is quite sufficient of itself to account for that part of the act not having been carried out.* And your petitioners are convinced, that all future attempts of this nature will, in like manner, be defeated.”

The inhabitants of Windsor (New South Wales), in a petition to the Queen, in 1848, in common with all the other addresses to the sovereign, express the following sentiments:—

“We, the undersigned inhabitants of the district of Windsor, in the colony of New South Wales, beg, in approaching your Majesty, to express our ardent and devoted loyalty to your Majesty's person and government, and our fervent desire that it may be permitted to you, by Divine Providence, long to sway the British sceptre with much prosperity and glory.”

After deprecating the changes proposed in the constitution of New South Wales, as intimated in the despatch of her Majesty's secretary of state, under date July 31, 1847, and addressed to the governor of the colony, the petitioners thus proceed:—

“As natural born subjects of your Majesty, we consider ourselves entitled to equal rights and privileges with our fellow-subjects in the United Kingdom; and we earnestly deprecate the changes alluded to, as laying the axe to the very root of those rights and privileges, by depriving us of the most valuable of them—the being present, by immediate representation, in the Assembly where are enacted the laws by which we are governed. We are most desirous to enjoy a constitution as nearly as may be alike to that of the United Kingdom; and we accordingly think it due to the colonists, that no measure of magnitude should be passed at home, affecting the colony, without their previous assent.”

After a protracted debate on the subject in the Legislative Council of New South Wales, in April, 1848, the Council recorded no opinion; but their views were adverse to the proposed changes. One of the motions, and the mode in which it was disposed, as also a classification of the voters, explains in some degree the state of parties in the colonial Legislative Council.

Question proposed.—That this committee do agree to the following resolution:—“That this Council is disposed to view favourably the proposition of separating the deliberations of the nominees of the crown from those of the representatives of the people.”—(Mr. Cowper.)

Question put.—That the word “not” be inserted before disposed, and the words “but that the cession of the territorial revenue, or of the Schedules A, B, and C, to the appropriation of this Council, would be

* The clause refers to the power of distress and sale given to the governor over the goods of the district treasurer, district councillors, or district electors, in the event of the district not paying the amount leviable by the governor for the police-rate in the district.

an amendment in the present constitution," after the word people.—(Mr. Wentworth.) Committee divided:

Ayes, 10.

* Mr. Murray.
* Mr. Wentworth.
* Captain O'Connell.
* Mr. Bowman.
* Mr. Lord.
* Dr. Bland.
† The Collector of Customs
* Mr. Danger.
* Captain Dumaresq.
Mr. Robinson (Teller.)

Elected, 9; official, 1;
total, 10.

Original question put.

Ayes, 11.

† Attorney-general.
† Colonial Secretary.
† Colonial Treasurer.
* Mr. Lowe.
† Mr. Berry.
* Mr. Macarthur.
† Mr. Darvall.
† Mr. Allen.
* Mr. Foster.
† Major-gen. Commanding
* Mr. Cowper (Teller.)

Elected, 4; official, 4;
nominees, 3; total, 11.

Note.—Those marked thus * are elected; thus †, official; and thus ‡, nominees.

The governor, in a despatch to her Majesty's secretary of state (dated 11th August, 1848, received, 19th January, 1849), conveying the details of the debate in the Legislative Council, thus expresses his own opinions in favour of two legislative chambers:—

"Your lordship will not fail also to observe that the main point of difference which led to the result was the question of the establishment of a Legislative Council distinct from a Representative Assembly, and a perusal of the debates which took place on this question will make your lordship acquainted with the fact, that the opposition that was raised to the constitution of these two legislative bodies was not grounded upon any principle of government, but simply and avowedly upon the assertion that a Legislative Council interposed between the executive government and the Representative Assembly would render the former more independent of the latter, and therefore not so liable to be controlled by the fear of coming into direct collision with it.

Having thus endeavoured to put your lordship in possession of the proceedings of the Council as briefly as was consistent with a clear explanation of them, it only remains for me to add my own opinion, which is, *I believe, confirmed by that of the most experienced and unprejudiced persons who have watched the working of the present constitution of this colony, that the assimilation of the constitution of this colony to that of the older British colonies, where distinct legislative bodies exist, would be generally considered to be extremely advantageous to its interests, but that the introduction of the double scheme of election, by mak-*

Noes, 11.

† Major-gen. Commanding
† Colonial Secretary.
† Mr. Allen.
* Mr. Foster.
† Attorney-general.
* Mr. Lowe.
† Mr. Berry.
* Mr. Macarthur.
† Mr. Darvall.
* Mr. Cowper.
† Col. Treasurer (Teller)

Elected, 4; official, 4;
nominees, 3; total, 11.

Committee divided.

Noes, 10.

* Captain O'Connell.
* Mr. Bowman.
* Mr. Wentworth.
* Mr. Dangar.
* Mr. Lord.
* Dr. Bland.
* Mr. Murray.
* Captain Dumaresq.
† Collector of Customs.
* Mr. Robinson (Teller.)

Elected 9; official, 1;
total, 10.

ing the district councils the constituents of the House of Assembly, would be most unpalatable to the whole community, and would excite throughout the colony a resistance which would in all probability render it inoperative, while it would not fail to create an ill-feeling towards her Majesty's government, which would not easily be allayed."

The language used by Sir William Denison, the governor of Van Diemen's Island, in a letter to her Majesty's secretary of state, dated 15th August, 1848, and received in London, 10th March, 1849, is very conclusive on the point expressed by the governor of New South Wales, and deserves record; but his expression as to the character of the people, in making wealth their sole consideration, is far too general and unqualified a censure on the colonists of New South Wales; yet, were it not so, they would have some excuse, in the absence of honorary distinctions—of prizes for emulation—and other gratifications, apart from or contrary to those of self-indulgence.

Sir William Denison, although writing under the idea that an act providing for a Representative Assembly in Van Diemen's Island, might already have been passed by the Imperial Parliament, nevertheless deemed it his duty not to withhold any information which might enable the secretary of state "to form a judgment as to the nature of the institution best adapted to secure the permanent welfare of these colonies."

His excellency thus proceeds:—

"Without, therefore, wishing or presuming to give an opinion on the general question of the best form of legislative body, I may say that, under the peculiar circumstances of these colonies, *I should most strenuously recommend the adoption of a second or upper chamber.*

"When we consider the elements of which society here is composed,—when we see the low estimate that is placed upon everything which can distinguish a man from his fellows, with the sole exception of wealth—when we see that even wealth does not lead to distinction, or open the road to any other ambition than that of excelling in habits of self-indulgence—it can hardly be subject of surprise that so few are found who rise above the general level, or that those few owe more to the possession of a certain oratorical facility than to their powers of mind or the justness of the opinions which they advocate.

"The broad plain of equality, as in America, receives the whole of the community; and though there are many who would gladly avail themselves of any opportunity of raising themselves above the general level, yet here, as in America, any attempt to do so would be frustrated by the jealousy of the remainder of the community.

"Your lordship can hardly form an idea of the character of the population of these colonies.

"It is usual to assume that colonies are off-shoots from the parent stock, containing in themselves the germs of all the elements of which society in the mother country is composed.

"This can only be said of any colony with many reservations, but it cannot be said of these colonies with any appearance of justice or truth.

"There is an essentially democratic spirit which actuates the large mass of the community; and it is with the view to check the development of this spirit, of preventing its coming into operation, that I would suggest the formation of an upper chamber.

"The members of this, call it senate or what you may, will be raised in some measure above the general level of society—they will be rendered independent of popular blame or approbation—but, being also free from the suspicion of acting under the control of the government, they will conciliate popular feeling between the executive and the legislature.

"I do not presume to enter into any detail of the mode in which such an assembly should be constituted, further than to express an opinion that the government should have as little as possible to do in the nomination or selection of the members.

"There must, of course, be some ex-officio representatives of the government in the house. The bishops of the church of England and Rome might sit as representatives of the ecclesiastical bodies; but as the object with which I advocate the establishment of a second chamber, is more that of operating morally upon the body of the community, than of facilitating generally the operations of the executive government, I should be loth to recommend the adoption of a plan which might in any way neutralize the beneficial action of such a body upon the mass of the people.

"I also think that, in order to render the members perfectly independent of either the government or the people, they should be appointed or elected for life.

"Trusting that your lordship will not be of opinion that, in offering these suggestions, I have in any way exceeded the limits imposed upon me by my position in this colony."

On the 31st of July, 1848, her Majesty's secretary of state, in a despatch to Sir Charles Fitzroy, the governor of New South Wales (which was written before the receipt of the preceding letters from the governors of New South Wales and Van Diemen's Land, or of the petitions or the resolutions of the Legislative Council of New South Wales), says:—

"I collect from the documents now before me, that the objections most strongly felt throughout the colony to the views propounded in my despatch, relate to the project of making the district councils serve as constituent bodies to the legislature; and, though in a less degree, to the division of the legislature into an assembly and a council, according to the ordinary pattern of the governments of those colonies which derive their free institutions from Great Britain."

It does not appear to me, from the documents laid before Parliament, that the colonists did object generally to two houses of legislature, according to the old established form of colonial government (except in one instance of comparatively trifling moment); their objection lay to two houses—one nominated by the crown or governor, and

the other by district councils—because the latter would also be under the influence of the governor.

I cannot but imagine that Earl Grey, in his sincere wish "not to impose upon the inhabitants of the colony a form of government not, in their judgment, suited to their wants," did not think it necessary to advise the carrying of his proposal into execution; and considered that the interests of the colonists would be better served, by leaving in their own hands the power of establishing two houses of legislature, whenever they shall have reason to do so. His lordship stated, in his despatch of 31st July, 1847, that he concurred in opinion with the governor of New South Wales, that the division of the legislature into council and assembly, founded, as it is, on long practical experience, would be a decided improvement upon the present form of the legislature in New South Wales; and, if the general feeling of the colony had responded to it, his lordship would have had no hesitation in advising her Majesty's government to lay before Parliament the measures necessary to accomplish the change. It being too late in the session of 1848, to introduce a bill for the separation of Port Phillip from New South Wales, and for the granting of Legislative Councils to the other Australian colonies, and for the general regulation of the affairs of the whole of the colonies, the secretary of state appears to have laid the subject before a committee of the lords' committee of the Privy Council, appointed for the consideration of all matters relating to trade and plantations, such committee consisting of several cabinet ministers and privy councillors, accustomed to the discussion of colonial matters.

On the 1st May, 1849, a court was held at Buckingham Palace before the queen, when a report of the lords' committee of the Privy Council for trade and plantations, was read, relative to a bill to be introduced into the Imperial Parliament for the "better government of the Australian colonies."

The following is an abstract of the leading points in the report:—In the ancient possessions of the British crown, which at present form so large a part of the United States of America, and in all the other British colonies, whether acquired by the occupation of vacant territories or by cessions from foreign powers, there prevailed until the commencement of the nineteenth century the almost invariable usage of establishing a

local legislature, consisting of three estates—that is, of a governor appointed by the sovereign, of a council nominated by the sovereign, and of an assembly checked by the people. During the nineteenth century, the crown acquired sixteen colonies; in no one of which has the whole colonial polity of a governor, council, and assembly been introduced; it has however been the practice of parliament to recognize the ancient principle, and to record the purpose of resuming the former constitutional practice so soon as the causes should have ceased to operate, which in each particular case had forbidden the immediate observance of it. The pledge has been redeemed in New South Wales, except so far as relates to the combination which has taken place there, of the council and assembly into one legislative house or chamber; and it has been also redeemed with regard to New Zealand, although peculiar circumstances have required a temporary postponement of the operation in that colony of the act passed by Parliament for establishing in it a representative legislature.

With regard to South Australia, and to Van Diemen's Island, (and also to Western Australia when the settlers shall be able and willing to sustain from their local revenues the expense of their own civil government, which is now provided annually by a grant of the Imperial Parliament,) the committee are of opinion that the time has arrived when parliament may properly be recommended to institute in each of these colonies "a legislature in which the representatives of the people at large should enjoy and exercise their constitutional authority;" and that on the separation of Port Phillip (which the committee suggest should be named *Victoria*, after her Majesty) a legislature should also be created in which the representatives of the people should exercise their constitutional authority and influence.

As to the nature of the legislatures to be established in the several Australian colonies, the committee say—

"If we were approaching the present question under circumstances which left to us the unfettered exercise of our own judgment, we should advise that Parliament should be moved to recur to the ancient

* It is a grave question, and demands serious consideration, whether the crown ought to give up its rights to the disposal of the waste lands in the colonies. Those lands, I think, ought to be viewed as the patrimony of the people of England, and to be rendered available for the maintenance of her labouring poor, who, unable to obtain remunerative employment at home, are desirous of seeking, in another

constitutional usage, by establishing in each a governor, a council, and an assembly. For we think it desirable that *the political institutions of the British colonies should thus be brought into the nearest possible analogy to the constitution of the United Kingdom.* We also think it wise to adhere as closely as possible to our ancient maxims of government on this subject, and to the precedents in which those maxims have been embodied. *The experience of centuries has ascertained the value and the practical efficiency of that system of colonial polity to which those maxims and precedents afford their sanction.* In the absence of some very clear and urgent reason for breaking up the ancient uniformity of design in the government of the colonial dependencies of the crown, it would seem unwise to depart from that uniformity. And further, the whole body of constitutional law which determines the rights and the duties of the different branches of the ancient colonial governments having, with the lapse of time, been gradually ascertained and firmly established, we must regret any innovation which tends to deprive the Australian colonies of the great advantage of possessing such a code so well defined and so maturely considered.

"But great as is the weight that we attach to these considerations, the circumstances under which we actually approach the question are such as to constrain us, however reluctantly, to adopt the opinion that the proposed Act of Parliament should provide for the establishment in each of the four Australian colonies of a single house of legislature only; one-third of the members of which should be nominated by your Majesty, and the remaining two-thirds elected by the colonists."

The grounds on which the committee arrived at this conclusion were, that a single chamber already legislated for New South Wales and Port Phillip; that it did not appear advisable to alter it, and that the other Australian colonies ought not to have a different legislative system.

They however recommended that the several provincial legislatures should have the power of "amending their own constitutions by resolving either of these single houses into two houses of legislature, subject to the approval of the crown; that the governor-general of Australia should have power to convene a General Assembly of not less than twenty nor more than thirty delegates, to be elected by two or more of the provincial legislatures, and that this General Assembly should have full power over the disposing and proceeds of the crown lands in Australia; the imposition of custom duties, and other general subjects."* The whole colonial revenues to be surrendered to the colonists,

and less densely-peopled portion of the empire, the subsistence and the means of elevation which is denied them by the over-crowded state of population in the United Kingdom. It is one thing to lay so high an upset price on land, as in New South Wales, as to stop its sale either in the colony or in England; it is quite another thing to give up all control, on the part of the crown, over those lands which have

except a civil list to be settled upon the crown, of an amount sufficient to defray the expenses of those services which it would be inexpedient to have to be provided for by annual votes of the respective legislatures; and a revision of the annual appropriation of the sum of £30,000 now voted from the revenues of New South Wales and Port

Phillip, for the support of public worship among the different churches of England, Scotland and Rome, and the Wesleyan Society; the distribution of which is deemed to be too strongly in favour of the Church or England, to be made on the basis of the following calculations; and the sum to be increased to £33,560 per annum:—

Voted by Legislative Council, for Religious Purposes.	In the present undivided colony of New South Wales.								
	Church of England.		Church of Rome.		Church of Scotland.		Wesleyans.		Total.
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£
Distribution of £30,000 according to Census of 1841 (existing arrangement)	17,581	2 4	8,510	14 6	3,136	9 11	771	13 3	29,998
Distribution of £30,000 according to Census of 1846	15,715	0 0	9,333	0 0	3,634	0 0	1,316	0 0	29,998
Sums which, according to the Census of 1846, will correspond with the sum now enjoyed by the Church of England, according to the Census of 1841.	17,581	0 0	10,441	0 0	4,066	0 0	1,472	0 0	33,560

According to the census of 1846, the distribution would be—New South Wales—Church of England, £14,812; Victoria—£2,769: ditto, ditto—Church of Rome, £8,757 and £1,684: ditto, ditto—Church

of Scotland, £2,979 and £1,087: ditto, ditto—Wesleyans, £1,176 and £296.

The following is the census of the various religious denominations in 1841 and 1846, upon which the above calculations are founded:—

Years.	Church of England.		Church of Rome.		Church of Scotland.		Wesleyans.	
	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.
Population, 1841	67,537	6,190	33,249	2,441	11,009	2,144	2,586	650
Population, 1846	79,810	14,923	47,187	9,075	16,053	5,856	6,338	1,597

The report having been approved by the queen in Council, the secretary of state proceeded to act on it, and on the 11th of February, 1850, a bill for the better government of her Majesty's Australian colonies, proposed by her Majesty's ministers, was brought into parliament; and the 19th of February following, this bill was read a second time. The following is an abstract of its leading provisions:—

1. The district of Port Phillip to be separated from the Sydney or Middle district, commonly called New South Wales; and, after separation, to be named Victoria, and to constitute a separate colony; and its boundaries on the north and north-east to be a straight line drawn from Cape Howe to the nearest source of the river Murray,

been acquired, in past years, by the valour, skill, and patriotic spirit of Englishmen. If the crown, its ministers, and the legislature of the United Kingdom declare they are unable to frame a system of representative colonial government, and to deal effectively

and thence, by the course of that river, to the eastern boundary of the colony of South Australia.

2. That New South Wales and Port Phillip shall each possess a Legislative Council; the number of members in the said councils to be liable to variation, and to be determined by the respective governors in council; and one-third of the whole number of each council to be appointed by the crown or its representative, the governor of the colony, and the remaining two-thirds to be elected by the inhabitants of the colonies, according to the electoral districts and franchises which may be established by the governors in council.

3. Legislative councils to be established in South Australia and in Van Diemen's with the proceeds of the sale of crown lands for the promotion of emigration, then there is no alternative but to permit the colonists to construct their own constitution, and to hand over to them the vast and valuable domains of the crown in their respective territories.

Island, not exceeding in number twenty-four each, of whom one-third shall be appointed by the crown. The electoral districts, the franchise, the representative qualification, and the laws for the regulation of the said councils, to be determined by the colonial councils or legislatures, when created.

4. A similar legislative council may be established in Western Australia, as soon as its colonists defray such part of the expenses of the civil establishments as is now defrayed by parliamentary grant.

5. The governors and Legislative Councils of New South Wales, Port Phillip, South Australia, Van Diemen's Island, and Western Australia have hereby authority to make laws for the peace, welfare, and good government of the said colonies respectively; and, subject to the provisions of the following civil lists, may appropriate to the public service the whole of her Majesty's revenue within such colonies, arising from taxes, duties, rates, and imposts levied on her Majesty's subjects in said colonies: provided that such law be not repugnant to the law of England, or interfere in any manner with the sale or other appropriation of the lands belonging to the crown within any of the said colonies, or with the revenues there arising. The governor must first authorise the specific appropriation of any sum of money, before it can be passed by the Legislative Council; and the money cannot be lawfully issuable except in pursuance of warrants under the hand of the governor of the said colony, directed to the public treasurer thereof.

The schedules, or civil lists, referred to in the foregoing are—

NEW SOUTH WALES.	
Governor	£5,000
Chief Justice	2,000
Two Puisne Judges	3,000
Salaries of the Attorney and Solicitor-General, Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	19,000
Colonial Secretary, and his department	6,500
Colonial Treasurer, and his department	4,000
Auditor-General, and his department	3,000
Salary of Clerk, and miscellaneous expenses of Executive Council	500
Pensions	2,500
Public Worship	28,000

VICTORIA.	
Governor	2,000
Judge	1,500
Salaries of the Attorney-General and Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	5,000

Colonial Secretary, and his department	£2,000
Colonial Treasurer, and his department	1,500
Auditor-General, and his department	1,100
Salary of Clerk of Executive Council, and miscellaneous expenses	400
Pensions	500
Public Worship	6,000

VAN DIEMEN'S LAND.

Governor	2,000
Chief Justice	1,500
Puisne Judge	1,200
Salaries of Attorney and Solicitor-General, Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	13,300
Colonial Secretary, and his department	2,800
Colonial Treasurer, and his department	1,800
Auditor-General, and his department	1,600
Salary of Clerk of Executive Council, and miscellaneous expenses	700
Pensions	2,000
Public Worship	15,000

SOUTH AUSTRALIA.

Governor	2,000
Judge	1,000
Salaries of the Advocate-General and Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	5,000
Colonial Secretary, and his department	2,000
Colonial Treasurer, and his department	1,500
Auditor-General, and his department	1,000
Salary of Clerk of Executive Council, and miscellaneous expenses	500
Pensions	—

The schedule, or civil list, for Western Australia to be not less in amount than the sum which may have been last authorized by Parliament to defray the charge of the civil establishment, in the year previous to the assembling of a Legislative Council.

6. The governors and Legislative Councils of the several colonies may alter all or any of the sums mentioned in the foregoing schedules, and the appropriation of such sums to the services and purposes therein stated; but such alteration cannot take effect without the signification of her Majesty's pleasure thereon, and any saving which may accrue from such alteration shall be applied to such purposes connected with the administration of the colony, as to her Majesty shall seem fit.

7. The district councils and the district police rate to be established by Act 5 & 6 Vict., c. 76, s. 41, in New South Wales, are avoided, and any letters patent issued under that Act, are revoked; but the governor may, upon petition made to him, grant charters under the great seal of the colony, and the same may take place in the other colonies in Australia.

8. The authority of the crown to disallow certain laws and ordinances is preserved.

9. The governor and Legislative Councils may impose and levy import custom duties, subject to the provisions of this act, and provided that no new duty be imposed upon the importation of any article at a higher rate than that levied upon the produce or manufacture of another country; *i.e.*, the colonies must have no discriminating duties.

10. The colonial legislatures to have full power to make further provisions for the administration of justice; to define the constitution of their courts of law and equity; and to regulate the jury law; a supreme court to be created in the new province of Victoria.

10. The existing boundaries of New South Wales and of Victoria may be altered by an order of the Queen in council; six months' notice to be given to either colony which shall not have petitioned for such alteration; and her Majesty may, on the petition of the inhabitants of the territories lying north of the thirtieth degree of latitude, erect the said territories into a separate colony.

11. The Legislative Councils of two or more of the above-named colonies may, by addresses to the governor-general of Australia, require the convocation of a general assembly, to consist of the governor-general and a house of delegates, to be elected by each Legislative Council, in the proportion of two for each colony, and one additional member for every 15,000 inhabitants in each colony; and this general assembly may make and vary its own constitution, subject to the confirmation of her Majesty in council. This general assembly to sit for three years, and then to be dissolved or prorogued by the governor-general.

According to the most recent censuses, the general assembly would be thus formed:

Colony.	Population.	Delegates.
New South Wales	155,000	12
Victoria	33,000	4
South Australia	31,000	4
Van Diemen's Island	46,000	5
West Australia (about)	—	3
Total	—	28

12. The general assembly of delegates may alter the acts 6 Vict., c. 36, and 9 and 10 Vict., c. 104, for regulating the sale of waste lands belonging to the crown in the Australian colonies, and may make laws for selling, demising, granting licences for occupation of, or otherwise disposing of the waste lands of the crown in the colonies represented in such

general assembly; and may impose, levy, and alter, or repeal duties of customs on the importation of goods into or from all the colonies represented in the general assembly, subjecting to appropriation to the public service of such colonies respectively by the separate legislatures thereof, such portions of the aggregate revenue as to such general assemblies may seem meet. The general assembly of delegates may also create and define the powers of a general supreme court of original jurisdiction or of appeal from the several courts of the respective colonies; post-office regulations; weights and measures; roads, canals, or railways traversing two or more of such colonies; the erection and maintenance of lighthouses and beacons; the imposition of shipping dues at any port or harbour within the said colonies; for the enactment of laws affecting the colonies represented on subjects which the respective Legislative Councils shall desire legislation; for the appropriation of such sums as may be necessary to the purposes designed by such legislation, and for the raising of such sums by an equal per centage on the revenues of all such colonies. But no duties to be levied upon articles imported for the supply of her Majesty's land or sea forces; and no duties, charges, prohibitions, exemptions, or privileges to be enacted contrary to or at variance with any treaty concluded by her Majesty with any foreign power.

13. The power of general assembly, if disputed, to be determined by her Majesty in council.

14. The governors and Legislative Councils, with the assent of her Majesty in council, may alter the Constitution of the Legislative Councils of their respective colonies; instead of a Legislative Council, as before provided, with one-third nominees of the crown, and two-thirds elected, they may establish a council, and a house of representatives, or other separate legislative houses, and vest in them the powers and functions of the Legislative Councils for which they may be substituted. But any bill passed for such purpose must be reserved for the signification of her Majesty's pleasure thereon, and be laid before both houses of parliament for at least thirty days before her Majesty's pleasure be signified.

15. The crown may nominate any of the governors of the Australian colonies governor-general of Australia.

There can scarcely be a doubt, that both the report of the committee of the Privy

Council, and the bill founded thereon, and introduced into parliament on the 11th February, 1850, have been dictated by the most liberal principles, and that her Majesty's government, in framing them, have sincerely desired to secure to the Australian subjects of the crown the fullest amount of political liberty. But granting the highest meed of praise to the ministers who propose to secure to Englishmen, in every British dominion, the inestimable blessing of free institutions; and to extend impartially to those who occupy even the most distant outposts of the empire, the privileges which their ancestors have gradually obtained, after centuries of sacrifice and struggle—it may be still fairly debated, whether the proposed new constitution for the Australian colonists, or the proposed plan of enabling them to make or amend their own form of government, is the course most likely to conduce to their ultimate well-being; and further, whether such course be compatible with their position as subjects of the British crown. The question happily invites discussion, and that of a nature most likely to elicit truth, and prompt to judicious and efficient measures, instead of forming the grounds of a mere party or parliamentary contest. There can be no difference of opinion as to the necessity of granting, as soon as may be, local self-government to the Anglo-Saxon race in Australia, to the furthest extent compatible with their relation to the sovereign of this realm. For the well-being of the Australians themselves, it is evidently very important, that whatever form of government be now granted, it should, at least for some years to come, be definitely settled by the Imperial Legislature, and not left to be a standing bone of contention among conflicting interests, by which the industrial proceedings of the colonists would be disturbed,—their feelings, if not indeed engaged in violent internecine democratic strife, at least kept in a state of feverish excitement, their attention being perpetually directed to the framing of constitutions which may not be agreed on for years to come, instead of their whole energies being engaged in the farther development and improvement of the resources of the fine country which already bears such indisputable proofs of their persevering and well-directed industry.

So far as the opinion of the colonists of New South Wales can be gathered from their petitions and recorded opinions, they object to the abrogation of their present

electoral franchise, by the transfer of their votes to electoral colleges or district councils, by which the elective power would be lodged in the hands of small irresponsible bodies, who practically would, in many instances, be nominated by the governor; and, even if that were not the case, would be probably directed by other influences than those of their constituents. But I cannot find throughout the official documents any conclusive expression against the establishment of two houses of legislature, such as now exist in Canada, Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, Jamaica, and other possessions of the crown; and which, even in Canada, have worked well for the past ten years. My own opinions on this point have long been recorded; while advocating the fullest grant of political liberty to our colonies consistent with their relation to the parent and governing state, I have always contended, that the link of political connection should not depend merely on a governor representing the crown. In my work on the *Colonial Policy of the British Empire*, published in 1837, the opinions I then and still entertain, are expressed as follows:—

Centuries of experience have demonstrated the beneficial practical working of the British constitution in its three constituent, independent, and yet harmonizing branches of king, lords, and commons; and as far as it is possible, and at suitable periods, I would wish to see the colonies enjoying similar constitutions; the governor representing the crown, the legislative council the lords, and the house of assembly the commons. It must be gratifying to all friends of rational freedom to reflect, that England has ever been foremost in bestowing on her distant settlements the advantages of her own political institutes, thus evincing a true sense of justice; whereas, as Montesquieu rightly observes, a republic governs its conquered provinces with more absolute and intolerable sway than a monarchy, and its remote possessions suffer all the evils without enjoying any of the advantages of monarchical government. With certain limitations elsewhere explained, the colonies enjoy all the advantages of the British constitution, so far as is compatible with their situation as distant provinces of an empire. The limitation of exception is, that the Legislative Council is nominated by the crown for life, or during the official tenure of those civil servants who are *ex officio* entitled to a seat in the Legislative Council. A question has, however, been recently raised by a party in Lower Canada,* as to the advantage of making the Legislative Council an elective body, instead of being, as at present, nominated by the king through the secretary of state. However desirous I feel for the extension of just principles, I cannot—looking to the slow progress

* This chapter was written in October, 1836, and consequently, before the debates on Lower Canada, relative to an elective Legislative Council, came on in the British parliament.

of rational freedom, and remembering that moral and mental independence of character are essentially necessary to the due exercise of the elective franchise—I cannot desire, either in the mother country or in her colonies, two elective chambers.

It may be said that the upper house (Legislative Council,) would be chosen by a higher class of electors than those who return members to the lower house, and that, therefore, the popular voice would be more calmly exercised, and property would have its due weight in the making of laws for the country;* but it is impossible to deny that even the higher classes in England (and how much more so in the colonies) are, to a certain extent, liable to great excitement, that their will is not always under the control of their reason, and that in times of political effervescence they would be almost as subject to the influence of their stormy passions as their poorer, though equally honest brethren. Those who have not mixed in colonial society can have but a faint idea of the extent to which party feeling on political subjects arrives; the animosities thus produced are of the bitterest nature—poisoning the very core of society, and destroying even the peace of families. Now, looking at domestic tranquillity, security of person, lightness of taxation, and freedom from oppressive laws, as the great and desirable advantages of political institutes, it would be insanity or criminality to throw a firebrand into the small community of a colony, with a pretence of gaining some utopian object.

Independently, however, of social considerations, we have no instance on record of any state long maintaining its political freedom either under a single chamber of representatives, or under two elective chambers, the one holding no control or check over the other, and both at the mercy of fluctuating popular favouritism, jealousy, and caprice. Since the abolition of the hereditary chamber of peers in France, but few traces of liberty have remained to the people, and the restoration of an hereditary peerage is now seriously entreated. The very antagonistic forces which an hereditary and an elective chamber exercise, are essential to the preservation of the powers of both. Gibbon, in reference to the Roman republic, correctly observes—"as both the consuls and the tribunes in their public and private interests were averse to each other, their mutual conflicts contributed for the most part to strengthen rather than to destroy the balance of the constitution; but when the consular and tribunitian powers were united—when they were vested for life in a single person—when the general of the army was at the same time the minister of the senate, and the representative of the Roman people, it was impossible to resist the exercise, nor was it easy to define the limits, of his imperial prerogative."†

The United States may be cited, perhaps, as an example in favour of the adoption of two elective chambers; but it should be remembered, that a few centuries of such government must be experienced, ere we pronounce authoritatively on a subject which

inspires with well-founded alarm, the most honest and able statesmen, who clearly see with Gibbon, that in elective monarchies the vacancy of the throne is a moment big with danger and mischief. We must wait and witness the effects of civilization, of a dense population, of adverse interests; we must watch the conduct of men who, like Marius and Cæsar, commenced by declaring themselves the protectors of the people, and ended by subverting the liberties of their country. Moreover, we should remember that the United States are a republic, and I do not think England is disposed to change her hereditary, constitutional monarch for an annual or quinquennial president.

Let us hear, however, the language of the most enlightened men of the United States on this important subject. Judge Story, himself a republican, in his commentaries on the constitution of the United States of America, in treating of the senate thus expresses his views on this topic: "Another and most important advantage arising from this ingredient is, the great difference which it creates in the elements of the two branches of the legislature; which constitutes a great desideratum in every practical division of legislative power. In fact, this division (as has been already intimated,) is of little or no intrinsic value, unless it is so organised, that each can operate as a real check upon undue and rash legislation. If each branch is substantially framed upon the same plan, the advantages of the division are shadowy and imaginative: the visions and speculations of the brain, and not the waking thoughts of statesmen or patriots. It may be safely asserted, that for all the purposes of liberty, and security of stable laws, and of solid institutions, of personal rights, and of the protection of property, a single branch is quite as good as two, if their composition is the same, and their spirit and impulse the same. Each will act as the other does; and each will be led by some common influence of ambition, or intrigue, or passion, to the same disregard of public interests and the same indifference to and prostration of private rights. It will only be a duplication of the evils of oppression and rashness, with a duplication of obstruction to effective redress. In this view the organization of the senate becomes of inestimable value.' Again he says, 'The improbability of sinister combination will always be in proportion to the dissimilarity of the genius of the two bodies; and therefore every circumstance consistent with harmony in all proper measures, which points out a distinct organization of the component materials of each, is desirable."

Another eminent writer on the constitution of the United States, the late chancellor Kent, in treating of the necessity of the powers of government being placed in separate hands, says: 'The division of the legislature into two separate and independent branches is founded on such obvious principles of good policy, and is so strongly recommended by the unequivocal language of experience, that it has obtained the general approbation of the people of this country. One great object of this separation of the

the people; in Connecticut and Rhode Island, the governor was elected by the colonists; and in some the revenue officers who collected the taxes were assessed by the people. Pennsylvania, which was a proprietary government, was a scene of never-ending contentions, and the colonists even petitioned the king to take its affairs under the management of the crown.

* Mr. Labouchere, a gentleman whom I much respect, stated, in the Canada debate in the House of Commons on the 8th March, 1837, that the old American colonies of England had elective legislative councils; but it will be found that it was the chartered and not the crown colonies which had such assemblies. Adam Smith says, that in three of the governments of the New England colonies, the legislative councils were chosen by the representatives of

legislatures into two houses acting separately, and with co-ordinate powers, is to destroy the evil effects of sudden and strong excitement and of precipitate measures, springing from passion, caprice, prejudice, personal influence, and party intrigue, and which have been found by sad experience, to exercise a potent and dangerous sway in single assemblies. A hasty decision is not so likely to arrive at the solemnities of a law when it is to be arrested in its course and made to undergo the deliberation, and probably the jealous and critical revision, of another and a rival body of men, sitting in a different place, and under better advantages, to avoid the prepossessions and correct the errors of the other branch. The legislatures of Pennsylvania and Georgia consisted originally of a single house.* The instability and passion which marked their proceedings were very visible at the time, and the subject of much public animadversion: and in the subsequent reform of their constitutions, the people were so sensible of this defect, and of the inconvenience they had suffered from it, that in both states a senate was introduced. No portion of the political history of mankind is more full of instructive lessons on this subject, or contains more striking proofs of the faction, instability, and misery of states under the dominion of a single, unchecked assembly, than those of the Italian republics of the middle ages, and which arose in great numbers, and with dazzling but transient splendour, in the interval between the fall of the western and eastern empire of the Romans. They were all alike ill-constituted, with a single unbalanced assembly. They were all alike miserable, and all ended in similar disgrace. Many speculative writers and theoretical politicians about the time of the commencement of the French revolution, were struck with the simplicity of a legislature with a single assembly, and concluded that more than one house was useless and expensive. This led the elder president Adams to write and publish his great work, entitled *A Defence of the Constitution of Government of the United States*, in which he vindicates with much learning and ability, the value and necessity of the division of the legislature into two branches, and of the distribution of the different powers of the government into distinct departments. He reviewed the history and examined the construction of all mixed and free governments, which had ever existed, from the earliest records of time, in order to deduce with more certainty and force this great practical truth, that single assemblies without check or balance, or a government with all authority collected into one centre, according to the notion of M. Turgot, were visionary, violent, intriguing, corrupt, and tyrannical dominations of majorities over minorities, and uniformly and rapidly terminating their career in a profligate despotism."

Mr. Jefferson, late President of the United States, in his remarks on the constitution of his native state, Virginia, says, "All the powers of government, legislative, executive, and judiciary, result to the legislative body. The concentrating these in the same hands is precisely the definition of a despotic government. It will be no alleviation, that these powers will be exercised by a plurality of hands, and not by a single one. One hundred and seventy-three despots would surely be as oppressive as one. Let those who doubt it, turn their eyes on the republic of Venice. An elective despotism is not the government

we fought for; but one which should not only be founded on free principles, but in which the powers of government should be so divided and balanced among several bodies of magistracy, as that no one could transcend their legal limits without being effectually checked and restrained by the others."

With reference, however, to the highly important consideration of having no check on the irregular exercise of popular power, the link that binds the colony to the mother country, so far as government can do so, would be materially, if not entirely injured by the substitution of an elective legislative council for one appointed by the crown through the functionaries of the state.

A governor, without any control over the two houses of legislature in a colony, would be reduced to a political cypher, and the adoption of the elective principle in a governor would soon take the place of his nomination by the king; in fact, the independence of, and separation from the mother country, would virtually occur, whether officially announced or otherwise, the colony thereby deriving all the advantages of the connection, while the parent state would lose everything which made the possession valuable to the empire.

It is not necessary to discuss here the relative advantages of the monarchical or elective principle in government; as before stated, the former has been tested by centuries in England, and found conducive to the greatest portion of happiness that a nation has yet possessed; so long, therefore, as a colony be united with Great Britain, it cannot be the desire or the interest of any practical statesman to alienate or weaken the just prerogatives and rightful power of the crown.

It seems to be totally forgotten by those who go the length of demanding an elective legislative council, that there is a wide difference between an imperial and a provincial government; that the former must of necessity have a control over the latter, so long as they maintain towards each other their relative positions of protecting and protected states. When the latter has ceased to be a colony, it is, of course, free to choose its own government, but so long as it remains in that state it has no right to ask, much less to demand, from the mother country democratic institutions which she herself does not possess, and the granting of which, if she did, would be fatal to all permanence of political or social connection.

The power held by the crown of appointing for life the members of the legislative council is, if properly regulated under the management of the proposed colonial board, of great benefit to the colony; it stimulates the wealthy and intelligent colonists to distinguish themselves, in order that they may attain the highest rank in their respective countries, and be deemed worthy the approbation of their sovereign. There is thus an honourable emulation kept up, which is of the most essential advantage in every community; for, as it is finely expressed by Sir William Blackstone (and the remark is as applicable to a colony as to the parent state), "The distinction of rank and honour is necessary in every well-governed state, in order to reward such as are eminent for their services to the public, in a manner most desirable to individuals, and yet without burden to the community; exciting thereby an ambitious yet laudable ardour, and generous emulation in others. And emulation, or virtuous ambition, is a spring of action which, however dangerous or invidious in a mere republic, or under a despotic sway, will certainly be

* Franklin's favourite but mistaken idea was a single legislature and a plural executive.

tended with good effects under a free monarchy; where, without destroying its existence, its excesses may be continually restrained by that superior power from which all honour is derived. Such a spirit, when nationally diffused, gives life and vigour to the community; it sets all the wheels of government in motion, which, under a wise regulator, may be directed to any beneficial purpose; and thereby every individual may be made subservient to the public good, while he principally means to promote his own particular views.

"A body of nobility is also more peculiarly necessary in our mixed and compounded constitution, in order to support the rights of both the crown and the people, by forming a barrier to withstand the encroachments of both. It creates and preserves that gradual scale of dignity, which proceeds from the peasant to the prince; rising like a pyramid from a broad foundation, and diminishing to a point as it rises. It is this ascending and contracting proportion that adds stability to any government; for when the departure is sudden from one extreme to the other, we may pronounce that state to be precarious.

"The nobility, therefore, are the pillars which are reared from among the people, more immediately to support the throne; and if that falls, they must be also buried under its ruins. Accordingly, when in the last century the Commons had determined to extirpate monarchy, they also voted the House of Lords to be useless and dangerous. And since titles of nobility are thus expedient in the state, it is also expedient that their owners should form an independent and separate branch of the legislature. If they were confounded with the mass of the people, and, like them, had only a vote in electing representatives, their privileges would soon be borne down and overwhelmed by the popular torrent, which would effectually level all distinctions. It is, therefore, highly necessary that the body of nobles should have a distinct assembly, distinct deliberations, and distinct powers from the commons."*

The bill for the government of the Australian colonies is now (15th March, 1850) before the Imperial Parliament, where it will doubtless receive a fair and full discussion. I have conferred with no member of the legislature thereon; received no private information; and formed my judgment solely from the facts published by parliament; and believing that it is the anxious desire of the queen, of her Majesty's ministers, and of all parties in both the Houses of Lords and Commons, to act with a just and liberal spirit towards the Australian colonies, I can only venture to express an earnest hope, that a measure conducive to the happiness of the colonists, and calculated to maintain their connection with England, may be the result of the deliberations of the Imperial Legislature. [See Supplement.]

LAW AND COURTS.—The statute laws of England are in force in the colony, aided by acts of Parliament and local enactments by

* The state of France, in 1850, under a single chamber, is a practical illustration of the dangers attendant on one Legislative Assembly.

the governor and Legislative Council. An Insolvent Debtors' Act is in operation, the benefit of which may be obtained by an insolvent a second or third time, if he pay fifteen shillings in the pound. Any public officer taking advantage of the provisions of the Insolvent Act, is, by an order of the secretary of state, dismissed the service. The execution of the laws devolves upon a supreme court, presided over by a chief and two puisne judges, whose powers are as extensive as those of the courts of King's Bench, Common Pleas, and Exchequer, at Westminster. The supreme court is a court of *oyer and terminer*, and *gaol delivery*; it is also a court of *equity*, with all the power, within its jurisdiction, of the lord high chancellor of England; and it is a court of *admiralty* for criminal offences, within certain limits; it is empowered to grant letters of administration, and it is an insolvent debtors' court. From the supreme court an appeal lies in all actions, when the sum or matter at issue exceeds the value of £500, to the governor or acting governor, who is directed to hold a court of appeals, from which a final appeal lies to the Queen in council. The supreme court is provided with an attorney and solicitor-general. There are 36 barristers, and 144 solicitors practising in the court. The sheriff exercises, by his deputies, the duties of his office over the whole territory. Circuit courts are held in different parts of the colony; they are courts of record, and stand in the same relation to the supreme court as courts of *oyer and terminer*, and of *assize* and *nisi prius*, in England, do to the king's superior courts of record at Westminster. Courts of general and quarter sessions have the same powers as those of England, and while the colony was a penal settlement, they might also take cognizance, in a summary way, of all crimes not punishable by death, committed by convicts whose sentences had not expired, or had not been remitted.

A vice-admiralty court, presided over by the chief justice of the supreme court, takes cognizance of civil cases only, such as seamen's wages, &c. There is an ecclesiastical court for clerical matters; but this court has no jurisdiction in testamentary affairs, the charter of justice having empowered the supreme court to grant letters of administration, and direct the distribution of testators' effects. Courts of requests have been established under authority 9 Geo. IV., c. 83, for summarily determining claims not ex-

ceeding £10 sterling, except the matter in question relates to the title of any lands, tenements, or hereditaments, or to the taking or demanding of any duty payable to her Majesty, or to any fee of office, annual rents, or other such matter, where rights in future would be bound, or to a general right or duty, and to award costs.* The decision of the court is final and summary, as in England. One commissioner, appointed by the crown, presides in all the courts of requests throughout the colony.

Imprisonment for debt was abolished by the Insolvent Act passed in 1844, on the grounds:—1st. That the imprisonment of the debtor gave a vindictive creditor the power of depriving other creditors of their right to benefit by the labour of their debtor; 2nd. That it drove the debtor, however much he might wish to devote his energies to the payment of his obligations, to seek refuge in the insolvent court. By the assent of a majority of the creditors, a debtor under this act may make a voluntary assignment of his property to the trustees appointed by the creditors, provided such assignment be published three times in one of the Sydney newspapers.

In the earlier stages of the colony, criminal juries were formed of naval and military officers, and civil causes were determined by a judge and two sworn assessors. Now juries, selected as in England, sit in all civil and criminal cases. In 1844 a new jury law was passed by the colonial Legislative Council, by which in civil cases there need only be four jurymen; if, after deliberating four hours, they cannot arrive at a unanimous judgment, the opinion of three-fourths may be taken as conclusive; and if, after deliberating twelve hours, the jury of four cannot agree, a new trial must take place. Mr. Baker, a lawyer of the Inner Temple, who visited New South Wales, says that the "Sydney bar is highly respectable in character, and is, certainly, the most numerous, and perhaps, taken as a whole, the best English bar out of England; several of its members earn from £1,000 to £3,000 a-year, or more." Mr. Baker fancied himself "transported to England," on entering the Supreme Court at Sydney, and seeing three judges on the bench, the registrar and other officers at their feet, the attorney-general and solicitor-general in their silk gowns, the crowd of "learned" gentlemen behind them;

all, from the judges downwards, duly wigged and robed, and the attorneys, hardly discernible from amidst the heaps of red and blue bags, and piles of red-tape bundles, in which they delight to bury themselves. Coroners are stationed in different districts, and great attention is rightly paid to this ancient and very important branch of jurisprudence. There are benches of unpaid magistrates at Sydney and in all the principal towns in the colony, aided by civil constables and a mounted police. There are several stipendiary magistrates.

MILITARY DEFENCE.—New South Wales and the other Australian colonies are perfectly defenceless against a foreign enemy; a hostile fleet might enter Sydney Cove, plunder the merchant shipping in the harbour, and lay the capital under contribution, without any effectual resistance being offered, for the few British troops that are in the colony are scattered at different outposts, and there is no militia in existence; and yet at a comparatively small cost, the harbour of Port Jackson, which would hold the entire fleet of England, might be rendered perfectly impregnable, and be made one of the strongest positions in the world. The entrance of Port Jackson is formed by two lofty headlands, distant about one mile and-a-half from each other, and appear like gigantic lock-gates within which the noble haven expands for fifteen miles into numerous coves, where vessels lie as sheltered as if they were in the London Docks. On the north and south heads of Port Jackson, batteries mounted with sixty-eight pounders would effectually command the entrance, across which, in time of war, a chain-boom might be drawn, supported by buoys. Directly in front of the entrance is the elevated George's Head, on which a battery of heavy guns might also be advantageously placed; so that with these three batteries, no hostile ship, even with a leading wind, could enter without being destroyed or disabled. There are several other islets in the harbour where well-constructed fortresses, and a citadel, with a few guns well manned, would tend to the effectual protection of Sydney Cove, and of the city; the few batteries now on either side of the Cove are merely fit for fring salutes. With the sea entrance well defended, it is not likely that any successful attempt could be made for the capture of the city of Sydney, by landing a force on the north-east shores of Botany Bay, as the Australians would be enabled to defend

* These powers are so laid down by Mr. H. W. Parker, in Mr. Clark's *Summary of Colonial Law*.

their country on a line of fifteen miles of broken country, capable of being made very harassing to an enemy. It would be advisable that the colonists should immediately set about the defence of Port Jackson; appropriate annually a moderate sum towards the construction of batteries at the heads; obtain from England heavy-metalled guns, and boom chains of sufficient length. A small battalion of colonial artillery should be organised; and, for this purpose, the queen would probably permit some of the most efficient gunners in the royal artillery to be drafted into the Australian corps. It is also indispensable to the security of the Australian colonies, that a militia law be passed, providing for the embodiment and training of every man between eighteen and forty-five years of age, capable of bearing arms, as is the case in our North American provinces, and other colonies. Canada, Nova Scotia, New Brunswick, Newfoundland, and even Prince Edward Island, have each an effective militia; and, in the event of hostilities with the United States, or any other country, they could bring immediately into the field, fully armed and equipped, at least a quarter of a million of trained soldiery. New South Wales, and the other Australian colonies, under their new constitution, will possess full control over their own revenue and expenditure; and they cannot expect the people of England to pay, out of the exchequer of this heavily-taxed country, for their fortifications and military defence. In time of war, England would, without doubt, send her fleets and troops to every part of this wide-spread empire; but her best defence must be the patriotism and bravery of the colonists themselves. During the American war of 1811-12, the French and English Canadian militia successfully resisted the American troops of the line; and but for the gallant conduct of that loyal body of British subjects, the regular regiments of our soldiery would have been inadequate to the defence of Canada. Thus must it be with the Australian colonists. The Imperial Parliament is granting them perfectly free institutions; and one of its necessary conditions must be, the providing adequately for their own defence against aggression. The number of her Majesty's troops in the several settlements in Australia, in Van Diemen's Island, and in New Zealand, is stated to be about 2,500; but, of these, nearly a moiety are stationed at New Zealand, in consequence of the recent hosti-

ties between the British and the aborigines; and a large number are employed at Van Diemen's Island, in guarding the convicts sent from England; it is unfair, therefore, to speak of New South Wales being a heavy charge to the crown for military protection; the colonists are quite able to provide their own internal police, and do not require British soldiers for that purpose. As regards Victoria or Port Phillip—Melbourne, the capital, and the harbour of Geelong, have not a single gun for their protection; Southern and Western Australia, and Van Diemen's Island, are also without defensive batteries or militia; and no time should be lost by the colonists in placing their territories in a state capable, at least, of some protection; for it is impossible to say, in the present anomalous state of Europe, how long England, or any other country, may enjoy the blessings of peace. For myself, I hate war; it engenders every bad passion in human nature; and is, consequently, repugnant to the first principles of Christianity, while, in a mere economical sense, it dissipates wealth, destroys industry, and converts men into mere machines for the slaughter of each other; but my own limited experience in the naval and military service of the crown, has taught me to estimate the value of an effective national defence, as being, under Providence, the best security for peace. The nation that would preserve its independence, in the present imperfect state of practical Christianity, must maintain a standing army and a fleet afloat; and this necessity will continue until the day arrive, when "nation shall no longer rise up against nation, neither shall they learn war any more." Then, indeed, may we "turn our swords into pruning-hooks;" but, until then, we must keep them in readiness, though the less they are used the better.

The number of troops of the line in New South Wales and Port Phillip, in December, 1848, was—field-officers, 6; officers, 42; non-commissioned officers and privates, 908 = 1,046. The troops are widely scattered, viz.—at Sydney, and in the forts in the Harbour, 706; Fort Macquarie, 12; Goat Island, 13; Cockatoo Island, 58; Paramatta (15 miles from Sydney), 29; Blackheath (66 miles), 48; Newcastle (75 miles), 28; Moreton Bay (450 miles), 34; Port Phillip (600 miles), 58; attached to mounted police, 20. The mounted police consists of 6 officers; 18 serjeants; 13 corporals; troopers, 74 mounted; 19 dismounted = 130. [See Supplement.]

CHAPTER VI.

REVENUE AND EXPENDITURE OF NEW SOUTH WALES, MONETARY STATE, &c.

For several years, the expenditure required for the maintenance of New South Wales, as a penal settlement, was borne chiefly by the British exchequer. The committee of the House of Commons, which sat in 1837-38, on transportation, referring to the cost of New South Wales and of Van Diemen's Island, as penal settlements, adduce the following statement:—

“It has been impossible for your committee to obtain an accurate statement of the total amount of British funds expended on the two penal colonies since their foundation, as the accounts have hitherto been kept principally with a view to their examination and audit, and not framed so as to afford the statistical information required. The sum really expended on account of the penal colonies, exceeds the subjoined estimate, which, however, may be considered sufficiently to approximate to the true amount, to give the house an idea of what has been the cost of the punishment of transportation:—

Cost of the transport of convicts	£2,729,790
Disbursements for general, convict, and colonial services	4,091,581
Military expenditure	1,632,302
Ordnance	29,846

Total from 1786 to 31st March, 1837,	8,483,519
Deduct premium on Bills, Coins, &c.,	507,195

£7,976,324

“The number of convicts transported to New South Wales and Van Diemen's Land up to the end of the year 1836, were 96,558; their conveyance to those colonies has, therefore, cost about £28 per head on the average; and the various expenses consequent upon their residence and punishment there has been at least £54 a head, in all more than £82 a head, how much more it is impossible for your committee to ascertain.

“The expense entailed upon this country by the penal colonies, has been, on the average since their commencement, £156,398 a year; but at present the annual expenditure is more than treble that amount, and is rapidly increasing every year. That expenditure can now be ascertained with considerable accuracy, as the commissariat accounts have been kept in an improved form since 1832. It should be remarked that the estimates for the penal colonies are not voted in one sum, but are scattered through various portions of the general estimates; for instance, the transport of convicts is defrayed out of the navy estimates; the pay of troops, out of the army estimates; the maintenance, &c., out of the miscellaneous estimates; the various dry stores required, out of the ordnance estimates, and innumerable sundries are paid out of the army extraordinaries.

“The following was the expenditure of this country on account of New South Wales and Van Diemen's Land in the years 1836-37:—

NEW SOUTH WALES:—

Ordinaries of the army	£46,801
Commissariat	3,450
Ordnance	12,014
Navy	4,641
Extraordinaries of the army	55,625
Special disbursements for convicts	127,949

VAN DIEMEN'S LAND:—

Ordinaries of the army	16,354
Commissariat	2,059
Ordnance	11,625
Navy	515
Extraordinaries of the army	20,867
Special disbursements for convicts	113,083
Transport of convicts	73,030

Total expenditure £488,013

“In 1836 the number of convicts in the two colonies amounted to above 60,000, and in that year the cost to this country was little more than £6 : 16s. a head; in the same year about 5,475 persons were transported at the expense of about £13 : 6s. a head. In these estimates of the expense of the system of transportation, neither the cost of the convict establishment at Bermuda, nor of the hulks at home, are included.”

It is evident, from the foregoing statement, that without reference to the moral part of the question of transportation, it is the cheapest mode of disposing of our criminals. Including all the heavy charges from 1787 to the close of the war in 1815, it appears that about 100,000 convicts have cost less than £8,000,000, or £80 each. Taking the average period of sentence at ten years for each prisoner, this shews a charge of about £8 a year for each convict, and during the year 1836, it was only £6 : 16s. Under the most economical management, a convict costs, in the Milbank Penitentiary, England, all things included, £25 a year; four times what he would cost the state, if a proper system of penal colonization were carried into effect; and the details in this volume prove the great amount of moral reformation which has taken place in New South Wales. The retention, in the United Kingdom, of 5,000 convicts a-year, would soon prove a heavy charge on the home exchequer; and when the period of their imprisonment is fulfilled, what is to become of them? The most humane and Christian policy is the foundation of settlements like that of New South Wales.

REVENUE.—It is unnecessary to enter into details of the early collections of revenue

in the colony. The limited number of free inhabitants, the few exportable products they possessed for several years, and the disinclination of the home government to press heavily on the colonists, prevented any endeavour to levy a large income for even their local government. The following statement of the revenue of the colony of New South Wales, from 1824 to 1848, is given in detail in a Parliamentary paper of 27th August, 1839, and subsequently from various returns. (It includes Port Phillip)—

Year.	General Revenue.	From Land.	Total.
1824	£49,191	£279	£49,471
1825	65,733	5,948	71,681
1826	69,478	2,742	72,220
1827	75,495	2,814	79,309
1828	91,306	5,437	96,743
1829	99,475	3,309	102,784
1830	102,743	1,985	104,729
1831	117,447	3,617	121,065
1832	122,163	13,683	135,847
1833	138,469	26,272	164,741
1834	161,960	43,482	205,442
1835	184,268	89,380	273,648
1836	198,129	132,396	330,526
1837	226,900	127,866	354,766
1838	220,780	125,729	346,509
1839	252,996	172,273	425,269
1840	332,332	354,060	686,392
1841	370,273	117,120	487,393
1842	371,937	63,149	435,086
1843	322,388	47,742	370,130
1844	274,185	44,524	318,709
1845	288,788	69,557	357,345
1846	270,550	76,271	346,821
1847	275,543	122,843	398,386
1848	295,566	105,281	400,847

The general revenue included duties on spirits imported or distilled in the colony; on tobacco imported; five per cent., *ad valorem*, on goods imported; fees, fines, licences, and other miscellaneous items. The total sum collected during the fourteen years ending 1837, on these branches of taxation, was £1,702,762. Of this, the *spirits imported* yielded £1,051,624; spirits distilled in colony, £15,364. Tobacco, £133,778; malt and spirit retail licences, £90,770; five per cent. custom duties, £79,535; fees of public officers, £74,296; proceeds of sales of different things, £48,652; tolls, ferries, and markets, £40,042; post-office collections (from 1828), £29,988; wharfage dues, £27,581; auction duties, £25,410. The other items were under £20,000. The total income derived from land, during the same period, was £460,217; of this, £428,936 were the proceeds of land sold, and £13,150 quit-rents. The amount of land sold in the first year of the period, was

£279; in the last year, £120,427. This statement shows a heavy taxation.

The details of fixed revenue of New South Wales (not including Port Phillip) for the year 1847-48, are thus shown:—

Items.	1847.	1848.
DUTIES :—		
On spirits imported	£58,715	£63,851
Ditto, distilled in colony	14,091	9,231
Tobacco, imported	38,915	36,089
<i>Ad val.</i> on goods imported	26,956	18,985
Tonnage on shipping in sup- } port of water police	627	695
Wharfage	1,339	1,165
DUES :—		
Entrance and clearance of } vessels	696	807
Light house	709	890
Harbour	681	742
Post office collections	14,103	14,458
Auction duty	4,834	3,249
LICENCES :—		
Auctioneers'	433	587
Retail spirits, &c.	20,615	22,999
Night and day billiard tables	2,110	2,440
Distillers' and rectifiers'	75	75
Hawkers' and pedlars'	241	264
Rent of tolls and ferries	5,331	3,972
Assessment on live stock be- } yond Settled Districts*	1,127	14,095
Fees in public offices	9,631	9,730
Fines of courts of justice, &c.	1,510	2,505
Incidental	4,921	2,681
Ditto	751	4,176
TERRITORIAL OR CROWN :—		
Sale of crown lands, and town } allotments, &c.	8,129	7,036
Quit Rents	824	4,277
Redemption of ditto	13,914	147
Licences for depasturing stock } <i>within</i> Settled Districts	2,836	1,166
Ditto <i>beyond</i> ditto	23,821	26,490
To cut timber on crown lands	218	344
Rent of quarries	5	10
Rent of government build- } ings and premises	91	140
Collections for church and } school estates	4,682	4,116
Other territorial sources	249	35
Special receipts and surcharges	1,640	2
Total revenue and receipts	264,820	267,449

The territorial revenue for 1848, in the colony, including New South Wales and Port Phillip, was £103,284; and the total revenue and receipts for the same year, of the territorial and general taxation and assessments, &c., was £401,850.

* *The assessment on stock* depastured on crown lands, beyond the settled districts of New South Wales: annually was—every horse, 3*d.*; head of horned cattle, 1½*d.*; each sheep, ¾*d.* Pending the issue of licenses, under her Majesty's order in council of 9th March, 1847, £10 for 4,000 sheep and forty head of cattle, and a proportionate increase for larger numbers. (See next page for other sources of revenue.)

222 DETAILS OF EXPENDITURE IN NEW SOUTH WALES, 1847-8.

The expenditure in detail of New South Wales alone, exclusive of Port Phillip, was—

Items.	1847.	1848.
CIVIL :—		
Governor and establishment	£5,561	£5,645
Executive Council	488	582
Legislative Council	3,327	2,657
Col. Secretary's department	6,098	6,534
Registrar-General's "	970	1,007
Col. Treasurer's "	3,633	3,814
Auditor-General's "	2,802	2,999
Customs' "	11,066	10,747
Chief Ins. of Distilleries,	1,525	1,605
Post Office "	12,194	14,707
Post Master's "	3,212	4,369
Col. Architect's "	1,309	1,269
Col. Storekeeper's "	859	1,120
Botanic Garden "	528	891
Government Printer's "	1,546	2,002
Total	55,123	35,593
JUDICIAL :—		
Supreme Court department	8,729	8,995
Crown Law Officers' "	3,520	3,243
Insolvent Estates "	444	506
Courts of Qr. Sessions "	2,193	2,223
" of Requests "	2,096	2,270
Sheriffs' "	2,788	2,829
Coroners' "	1,706	1,997
Total	21,480	22,067
POLICE* :—		
Sydney City police	7,769	7,464
" Water "	1,182	1,432
Within settled Districts	21,387	21,229
Beyond the settled Districts	5,067	8,365
Mounted police	10,942	9,177
Border "	1,376	—
Native "	—	227
Total	47,725	47,897
GAOLS :—		
Sydney	£3,180	£3,466
Country districts	4,336	4,246
Total	7,516	7,713
MEDICAL :—		
Health Officer and Med. Board	326	325
Lunatic Asylum	3,044	3,794
Total	3,370	4,119
CLERGY AND CHURCHES :—		
Ch. of England established	14,401	14,114
Ditto building churches, &c.	3,411	3,015
Presbyterian established	2,101	2,127
Ditto building churches	182	400
Wesleyan established	800	662
Roman Catholic established	5,536	5,780
Ditto building chapels	1,812	3,088
Total	28,244	29,188

Items.	1847.	1848.
SCHOOLS :—		
Protestant Male Orphan	1,471	1,489
" Female Orphan	1,268	1,603
Church of England Public	4,032	3,991
Presbyterian "	1,921	1,736
Wesleyan "	549	570
R. Cath. { Institution for Des- }	1,168	1,264
{ titute Children }		
{ Public Schools	1,846	1,784
Denominational School Board	—	137
National " "	—	4
Total	12,258	12,582
MISCELLANEOUS.		
Pensions paid in the colony	576	593
Public Institutions :—		
Support and medical treat- }	548	903
ment of free paupers		
In aid of Sydney Dispensary. }	627	763
Hospital, Paramatta	—	37
" Windsor	141	174
" Goulbourn	208	198
" Bathurst	139	69
" Maitland	188	234
Mechanics' School of Arts	200	200
Colonial Museum	300	300
Vaccination	75	100
Public buildings and works	31,781	33,755
Witnesses Supreme Court	1,806	2,210
" Quarter Sessions	903	1,213
Travelling expenses, judges, &c.	850	802
Advances to Col. Agent General	16,085	17,886
" towards new Mil. Barracks	8,250	—
" on account Gov. New Zealand	153	2,304
" South Australia	—	299
" Van Diemen's Island	—	50
" Madras	—	36
Revenue and receipts returned	3,282	3,723
All other disbursements	2,352	2,347
Total	68,473	68,196
Arrears of previous years	349	917
Gross total, Sydney district	244,541	252,638

Licences.—Annual: auctioneers, for all the colony, £15; for a police district, only £2; publicans, general, £30; wine and beer only, £10; billiard table, £10; to keep open after nine o'clock at night, £10; packet licence, for wines, &c., £2; confectioners, for ginger and spruce beer, £1, distilling, £50; rectifying and compounding, £25; hawkers and pedlars, £1; stage carriage, 5s.; carters, 2s. 6d.; porters and boatmen, 5s. each.

To cut timber on vacant crown lands, annually, £2, except cedar, which is £4.

The tolls and ferries in the colony are numerous, and the rates levied about the same as in England. The rate of customs duties is stated under *Commerce*. There is an extensive list of fees, which are exacted in

* There are 32 police districts in New South Wales. The police are in number 361. The average expense for this protection, to each inhabitant, is under 4s. per head.

the different public offices in the colony, civil and ecclesiastical, and carried to the credit of the public revenue.

Auction duty.—Ten shillings on every hundred pounds sterling of the purchase-money.

Postage of letters.—Weighing less than half-an-ounce, not exceeding fifteen miles, 4*d.*; twenty, 5*d.*; thirty, 6*d.*; fifty, 7*d.*; eighty, 8*d.*; one hundred and twenty, 9*d.*; one hundred and seventy, 10*d.*; two hundred and thirty, 11*d.*; three hundred, 1*s.*; for every hundred miles above three hundred, 1*d.* By sea, from one part to another of the colony, 4*d.*; colonial newspapers, within the colony, for seven days, transmitted once as a single letter. Ship letters, for receipt or despatch, in addition to inland postage, 3*d.*, 6*d.*, 9*d.*, or 1*s.*, quadruple.

Total—in	1847.	1848.
Expenses	£558,891	£583,088
Revenue and receipts . . .	534,594	551,246

The commissariat department in N.S.W.	
Paid for Military service in 1848	£45,326
„ Ordnance ditto	10,783
Total military service	£70,716
Convict service	14,651
Not connected with the colony:—	
Army, pensions, &c.	£8,608
Commissariat, pay and pension	625
Navy	10,224
Van Diemen's Island	32,506
New Zealand	83,776
North Australia	2,490
East India Company, advances to	142
Excise	9
Irish government, police, pensions	111

Total, not connected with the colony, £138,491

The expenses on account of 4,015 convicts in New South Wales, defrayed from the military chest, was £14,651.

In September, 1849, the governor of New South Wales had remitted to the lords of her Majesty's treasury £180,000, to pay the passage of emigrants from the United Kingdom during the year 1847-8. Of this sum, £100,000 was authorized to be raised in the colony, by the issue of debentures, secured on the territorial revenue of the colony. The debentures were issued in sums of £100 each, bearing interest at the rate of 3¼*d.* per diem, or £4 18*s.* 10¼*d.* per cent. per annum. They would be received as cash in payment for crown lands, but otherwise be redeemable at par within three years, at the option of the government, or within five years, at the option of the holder of a debenture.

The sums paid from the colonial treasury of New South Wales on account of immigration and quarantine, from 1832 to 1847, have been very large:—

—	1832-47.	1848.	Total.
Immigrants brought into the colony	£974,970	£105,026	£1,079,996
Passages of clergymen, missionaries, and others	11,760	—	11,760
Superintendence, maintenance, lodging, &c., after arrival in colony	35,746	4,145	39,892
Quarantine	23,068	793	23,861
Total	1,045,544	109,965	1,155,510

This statement does not include the sum of £25,684, paid as interest on land and immigration debentures, issued to the extent of £149,700, of which the whole has been paid off. [Latest returns in Supplement.]

BANKING.—Monetary system.—Previous to 1817, the circulating medium of the colony consisted principally of the private notes of merchants, traders, shopkeepers, and publicans, the amount being sometimes so low as sixpence. To remedy the evils attendant on such a state of things, the bank of New South Wales was, in 1817, incorporated by a charter under the seal of the colony, with a capital stock of £20,000 sterling, raised in shares of £100 each. The amount of shares subscribed was £12,600, and notes were issued by the bank for 2*s.* 6*d.*, 5*s.*, 10*s.*, £1, and £5. In the first year of its incorporation, the bills discounted by the bank amounted to only £12,193; in 1818 they rose to £81,672; in 1819 to £107,256; demonstrating the necessity that had existed for such an establishment, and the advantage and convenience that was found to result from it. Interest was not uncommon at the rate of ten per cent. per annum. The dividends declared in 1818 were at the rate of twelve per cent.; for 1819, twenty-one per cent.; for 1820 and 1821, twelve per cent.; and for 1822, fifteen per cent. The charter was granted for seven years, which was of course renewed. Each shareholder was responsible for the whole of the proceedings of the bank, thus giving greater stability to the institution, and securing a more careful management of its transactions. The bank seldom advances money upon real securities of any description, nor does it grant cash credits, or allow any interest upon current accounts, or permanent lodgments of cash. The capital of the bank of New South Wales was originally about £150,000, di-

vided into 1,500 shares of £100 each, and the amount of capital paid up about £35,000. The affairs of the institution are managed by a president and eleven directors, elected by the shareholders. Every £50 paid up gives a vote. In examining the proceedings of the bank in 1836, I noticed a remarkable fact, namely—that the establishment has never sustained any actual losses through the non-payment of the paper which it has discounted. Whether it has since sustained any losses, I am unable to say. Up to the year 1824, the bank discounted at the rate of eight per cent., after which the rate of discount was increased to ten per cent. The colonial government pays and receives in specie only; and in consequence of its receipts, from the customs, duties, sales, and leases of land, and other sources of revenue, having considerably exceeded the amount of its disbursements, it has frequently withdrawn from circulation nearly all the specie in the colony. In consequence of this, and the remittances occasionally made of specie to Canton and other places, with which a trade is carried on by the colonists, the bank of New South Wales, though far more than solvent, has more than once been under the necessity of suspending the payment of specie on demand. It is a fact, highly creditable to the bank and to the colonists in general, that when, owing to the severe drought during the panic which occurred in 1826, and which continued for three years with little intermission, there were bills to the amount of £18,000 over-due to the bank, while the whole capital did not, at that time, exceed £22,000. The confidence of the public was so great, that, by prudent management, not a sixpence of the over-due bills was lost, and the bank continued to pay a dividend all the time of from fifteen to twenty per cent. The reliance of the colonists on the stability and integrity of the establishment was so entire, that instead of any run being occasioned on the bank, the inhabitants, on the contrary, with one accord, poured into its coffers all the specie they could collect, and, by refraining from demanding it as much as possible, soon enabled the directors to resume cash payments. The bank issues notes from £1 to £20 and upwards. The capital at present paid up is about £125,000.

In 1836, a second bank was established at Sydney, termed the *Bank of Australia*, with a capital of £220,000. The *Bank of*

New South Wales was established, and largely supported by the emancipists; and the *Bank of Australia* by those colonists who arrived free in the country, and who acquired the title of exclusionists. For some years this new institution was highly prosperous, and it seemed to be a powerful rival to the other establishment. The yearly dividend varied from twelve to fifteen and twenty per cent.; but, in the disastrous period of 1842–3, the *Bank of Australia* became deeply involved, and largely indebted to the metropolitan *Bank of Australasia*: it has, consequently, become necessary, together with the *Sydney Bank*, to wind up affairs.

In May, 1835, a London company was incorporated by royal charter, and called the *Bank of Australasia*, with a large capital, for the purpose of establishing banks of issue and deposit in New South Wales, Van Diemen's Land, and other settlements in Australasia. One-half of the company's then capital (£200,000) was required to be paid up before the commencement of business, and the entire capital within two years. The stock was divided into 5,000 shares of £40 each (500 of which were reserved for allotment in the colonies), to be paid up as follows:—£10 per share at the time of subscribing; £7 at three months from that date; £6 at six months; £3 at nine months; £4 at twelve months; £5 at fifteen months; and £5 at eighteen months. The management of the company's affairs is vested in the London board of directors, appointed by the proprietors; and the banks in the colonies are conducted by local directors, and other persons duly qualified, appointed by the London directors. The paid up capital of this bank is now £900,000. Its manager in New South Wales unfortunately allowed the *Bank of Australia* to become largely indebted to its Sydney branch, and, for some time, no dividend has been declared. The verdict of the courts of law in England has established the validity of its claims on the *Bank of Australia*. The prosperity of the colony is reviving; and it is probable the shareholders will soon be in the periodical receipt of a fair dividend. This establishment has branches in New South Wales, Port Phillip, South Australia, and Van Diemen's Island.

The *Union Bank of Australia* was established in London in 1837, with a capital of £1,000,000. The institution was at once so favourably viewed, that the whole of its shares were taken as soon as issued, without

having been offered for sale by advertisement; and although the liability of each proprietor was not limited by a royal charter. Business was commenced by a junction with the *Tamar Bank* at Launceston, Van Diemen's Land; a branch was next opened at Hobart Town, Van Diemen's Land; then at Sydney, New South Wales; next at Melbourne, Port Phillip; and subsequently at New Zealand, and in other parts of Australasia. The number of branches is now ten; they are managed, as are those of the *Bank of Australasia*, by an excellent board of directors in London, with boards of local directors in the colonies.

This institution has been admirably conducted from its commencement; the dividends paid annually have ranged from six per cent. to ten, the average of the whole period has been eight per cent. The bank has now a paid up capital of £820,000, and a subscribed capital of £1,000,000. Through this excellent institution, as also through the *Bank of Australasia*, money may be safely and economically transmitted from England to any part of Australia, and *vice versa*.

The *Commercial Bank* at Sydney, New South Wales, is a modern establishment. It has a capital of £73,000 paid up. By prudence it withstood the recent commercial crisis, and pays a dividend of ten per cent. per annum.

An *Australian Trust Company*, has been

established in London by royal charter, with a capital of £1,000,000; I believe it operates principally by making advances on land, stock, &c.; its proceedings do not therefore appear among the banking returns; neither does the *Scottish Australian Investment Company*, whose funds are employed in advances in Australia. For the last few years the operations of such institutions must have been very difficult, but when the colonial depression passes away, the field for investment is large, lucrative, and, judiciously conducted, perfectly safe. [See Supplement.]

Savings' Banks are established in different parts of the colony. The deposits in them in February, 1849, were, at Sydney, by 3,606 depositors, £142,104; Windsor, 88 depositors, £2,496; Paramatta, 115 depositors, £2,287; Maitland, 89 depositors, £2,500; Bathurst, 78 depositors, £3,077; Penrith, four depositors, £120. The total deposits, including other sums, was £172,638

The coin in the colony, in proportion to the population, was per head in 1836, £5 9s., in 1837, £5; in 1838, £5 6s.; in 1839, £4 10s.; in 1840, '41, '42, £3. This explains the commercial crisis of 1841-2.

The following is a general abstract of the sworn returns, rendered pursuant to the act of Council, 4th Victoria, No. 13, of the average assets and liabilities, and of the capital and profits of the undermentioned banks of the colony of New South Wales, for the quarter ending 31st March, 1849:—

Liabilities, Assets, Capital, &c.	New South Wales.	Commercial.	Australasia.	Union of Australia.	Total.
LIABILITIES:—					
Notes in circulation	£ 34,519	£31,226	£79,560	£90,369	£235,675
Bills in circulation	—	—	13,117	7,803	20,921
Balances due to other banks	—	—	—	212	212
Deposits	225,767	152,735	354,781	412,070	1,145,354
Total liabilities	260,286	183,961	447,459	510,455	1,402,163
ASSETS:—					
Coin	157,564	90,958	146,774	245,610	640,908
Landed property	12,570	3,600	15,820	27,018	59,009
Notes and bills of other banks	—	47	1,376	—	1,424
Balances due from other banks	5,599	12,772	—	3,022	21,393
Notes and bills discounted, and all other debts due to the banks	225,793	152,566	779,240	467,159	1,624,760
Total Assets	401,528	259,945	943,212	742,810	2,347,497
CAPITAL AND PROFITS:—					
Capital paid up	125,283	72,955	900,000	820,000	1,918,238
Rate per annum of last dividend	8 per cent.	10 per cent.	Nil.	6 per cent.	—
Amount of dividend	5,011	3,237	—	25,317	33,566
Amount of reserved profits after paying dividend	17,150	993	53,451	77,930	149,526

Note.—Out of reserved profits of the N. S. Wales Bank, a bonus of 5 per cent. was, at the same time, paid to Shareholders; and a bonus of 5s. per share, equal to 2 per cent. was also paid by the Union Bank of Australia.

The quantity of coin in the colony for twelve years is thus shewn; it is to be observed that the local government deposits its treasure among the several banks, which will account for the small sum in the colonial treasury.

Coin in the Colonial Treasury, the Military Chest, and the several Banks, on 31st December in each year from 1837 to 1848, inclusive.

Year.	Colonial Treasury.	Military Chest.	Banks.	Total.
1837	£245,250	—	£182,182	£427,432
1838	163,000	—	357,127	520,127
1839	124,100	—	391,969	516,069
1840	38,900	£49,151	309,529	397,581
1841	25,000	10,000	427,624	462,624
1842	—	32,409	442,980	475,389
1843	—	3,000	420,972	423,972
1844	—	11,000	548,923	559,923
1845	20,000	54,315	780,850	855,166
1846	25,000	121,173	681,132	827,306
1847	30,600	30,056	573,529	634,186
1848	20,600	15,082	598,121	633,803

Of the whole coin, probably not £50,000 is in active circulation, which, added to about £150,000 bank notes in active circulation, will not give of paper and gold one pound per head annually for the circulating medium of the colony; whereas it ought at the least be five times that amount to facilitate the transfer of property, which takes place yearly to the amount of several millions. The sales by auction alone were in 1850 more than one million sterling annually, and this description of business has largely increased, as shewn in the following table:—

Auction Duty paid into the Colonial Treasury of New South Wales (including the District of Port Phillip) from the year 1834 to 1848, inclusive.

Year.	Amount of Duty.	Amount of Sales.
1834	£2,327	£155,156
1835	3,135	209,053
1836	4,697	313,171
1837	4,820	321,346
1838	6,137	409,166
1839	7,700	513,388
1840	18,701	1,246,742
1841	14,455	963,696
1842	10,291	686,088
1843	6,818	454,565
1844	4,662	310,831
1845	6,068	404,542
1846	6,217	414,490
1847	7,061	470,781
1848	4,551	787,800

Note.—From 1st January, 1848, the duty was reduced from 30s. to 10s. per cent., by Act of Council, 11th Victoria, No. 16, but was made chargeable on all sales effected by licensed auctioneers by private bargain as well as by auction.

The amount of British coin in New South Wales on the 31st of December, 1848, was—In colonial treasury, £20,600; military chest, £15,082. *Banks*—New South Wales, £176,430; commercial, £79,724; Austral-Asia, £137,887; Union, £204,078; in the hands of private individuals, supposed £20,000. Total, £653,803. Paper currency in circulation: *Banks*—New South Wales, £31,716; commercial, £25,601; Australasia, £74,292; Union, £74,194. Total, £205,803. This may be considered a sound state, when there is only £205,803 paper note circulation against £654,803 in coin. Such an amount of circulation is, however, far too small for the healthy business of the colony.

At the period of the commercial difficulties, in 1842–3, the local legislature passed a law “to give a preferable lien on wool, from season to season, and to make mortgages of sheep, cattle, and horses valid without delivery to the mortgagee.” This law, as regards live stock, was based on the principle that had been adopted for more than a century in the West Indies, where slaves were made real estate, and were literally walking freeholds, subject to all the incidents of freehold property. Although, in this respect, opposed to the spirit of the British laws, the colonial Legislative Council, after two years’ trial of the act, finding it beneficial to the colonists, recommended its continuance; and as live stock could not carry on its backs the muniments or title deeds belonging to real property, an efficient registry of all transactions respecting them was adopted. The annexed shows the amount of mortgages since 1843. (This return does not include the Port Phillip district). In a statement of the registrar-general, dated Sydney, 30th January, 1847, it is remarked that, in the return of the number of sheep and amount of money advanced under the Lien Act, it would appear as if an additional sum was advanced each subsequent year upon that mentioned to have been advanced the year previous. It must, however, be borne in mind that as the Lien Act only authorises an advance to be made on the ensuing clip of wool, the liens are renewable every year, and that consequently the same sheep and money may be included in one year as that mentioned for the previous year. The same remark may also apply to the mortgages of sheep, cattle, and horses, as the mortgages are generally made redeemable a twelvemonth from the date thereof.

MORTGAGES ON LIVE STOCK, AND ON WOOL, 1837 TO 1848. 227

In the return of the amount secured by mortgages of real estate, however, the repayment of the amount is upon an average required to be made every three or four years, consequently in the return under this head the same money may have been relent and resecured thrice within ten years.

Number and amount of preferable Liens on Wool, and of Mortgages on Live Stock, registered at Sydney.

Liens and Mortgages.	1843.	1844.	1845.	1846.	1847.	1848.
Preferable liens on wool:—						
Number of liens	54	139	125	149	199	240
Number of sheep	318,739	837,997	657,989	813,951	1,095,402	1,378,180
Amount of liens	£30,664	57,733	55,865	71,351	107,447	108,892
Mortgages on live stock:—						
Number of mortgages	96	226	152	146	168	205
Number of sheep	397,995	694,381	464,713	491,518	623,257	1,118,762
Number of cattle	44,430	81,679	49,131	42,870	45,578	84,411
Number of horses	903	2,158	1,568	1,070	1,110	2,056
Amount lent	£178,567	241,727	132,355	150,733	137,856	219,756

There are no usury laws in New South Wales. The Legislative Council recently proposed to reduce the legal rate of interest to not more than eight per cent.; but her Majesty's government rejected the proposi-

tion. It is not possible to state accurately, therefore, at what rates money is lent on wool and live stock, nor on mortgages of land; but the range is about eight to ten, or even twelve, per cent.

Return of the number and amount of Mortgages on Land in the colony of New South Wales, registered at Sydney, from the year 1837 to 1846, inclusive.

Year.	Lent on Town Lands.		Lent on Country Lands.		Lent on Town and Country Lands.		Total.	
	No. of Mortgages.	Amount.	No. of Mortgages.	Amount.	No. of Mortgages.	Amount.	No. of Mortgages.	Amount.
1837	145	£108,860	130	£102,817	11	£19,336	286	£231,014
1838	139	59,702	207	174,388	10	14,801	356	248,891
1839	159	112,835	213	189,447	11	46,534	383	348,818
1840	155	112,158	281	355,224	23	47,358	459	514,741
1841	241	266,944	417	643,111	51	188,685	709	1,098,741
1842	238	282,659	333	384,566	54	157,186	625	824,412
1843	246	275,386	285	333,487	51	446,707	582	1,055,580
1844	192	94,400	252	144,352	50	61,065	494	299,818
1845	135	111,659	152	107,585	31	53,577	318	272,822
1846	146	64,856	148	86,726	14	18,792	308	170,374
1847	156	81,516	149	82,605	15	16,432	320	180,554
1848	196	110,501	103	70,572	8	21,572	307	202,646

The colonists are not, certainly, largely in debt, either to capitalists or to the bank; and there appears fair grounds for assuming that their mercantile affairs are now in a sound and prosperous state.

PUBLIC COMPANIES.—There are several institutions in New South Wales connected with the commercial affairs of the colony. The *Australian Agricultural Company* was formed in London, by royal charter, in 1824. The design of the projectors was—

1st.—The breeding of horses, on an extensive scale, for sale in New South Wales and in India.

2nd.—The breeding of cattle and other live stock, the raising of corn, tobacco, &c., for the supply of residents in the colony, and the manufacture of salt.

3rd.—The introduction, at a future period, of wine, olive oil, hemp, flax, silk, opium, &c., as articles of export, and the raising of coal at Newcastle, N.S.W.

To enable the company to carry their objects into effect, a grant of 1,000,000 acres of land was made to them in fee simple by his Majesty's government. This grant has been selected in three locations, viz.—

- At Liverpool Plains . . . about 250,000 acres.
- Peel's River „ 310,000 „
- Port Stephens „ 440,000 „

Of this territory, the company have the power of leasing or selling 500,000 acres, after the expiration of five years, provided the sum of £100,000 shall have been expended on the land, in the formation of roads, the erection of buildings, clearing, cultivating, fencing, draining, or other improvements; and also of alienating any portion of the remaining 500,000 acres, by licence from his Majesty's secretary of state.

On the 31st of March, 1834, the total number of sheep belonging to the company were—French Merino, 4,940; Saxon Merino, 2,866; Anglo-Merino, 1,552; improved colonial, 27,254:—total of sheep, 36,615. Of horses, thorough-bred and Cleveland, and the produce of those breeds, 197; colonial ditto, 129; Welsh and Timor ponies, and their produce, 58: total, 384. Of cattle, Durham, 23; improved colonial, 330; Scotch, 51; improved colonial, 867; colonial, 1,305; working oxen, 227: total, 2,803.

The following is a return of the stock of horses, horned cattle, and sheep of the Australian Agricultural Company, at periods of five years from the establishment of the company to present date:—

Periods.	Horses.	Horned Cattle.	Sheep.
Formation of company	13	208	958
1830	245	2,227	21,365
1835	422	2,924	55,695
1840	569	5,187	79,961
1845	972	7,189	124,205
1850	not	yet	known.

Note.—Intermediately from the formation of the company to the year 1830, a considerable number of cattle and sheep were introduced by purchase and importation; in the year 1830 importation ceased; and from 1835 to 1845, large sales, slaughter for maintenance of establishment, and boiling down proceeded to a large extent; there were also some items of casualties—age, accident, and disease.

In the year 1825, a negotiation was concluded with his Majesty's government, by which the mines of coal in New South Wales which had been previously worked by the local government, were transferred to the company, with a grant of 2,000 acres of the coal field. These mines are situated at Newcastle, about sixty miles to the north of Sydney, at the south entrance of a secure harbour, called Port Hunter. The coal is being largely worked (see mines.) The arrangements with her Majesty's government are now satisfactorily concluded, and it is to be hoped that the shareholders who have invested their capital in this useful association to the amount of £300,000 will now begin to reap some reward for their well-directed exertions and sacrifices.

The Australian Agricultural Company is now offering for sale or lease all that portion of its valuable estate near Port Stephens, containing about half a million of acres, which are bounded by the river Manning, intersected by other streams, and provided with roads and bridges, which have been constructed by the company at a cost of

many thousand pounds. There are churches and schools, and a resident clergyman, schoolmaster, and surgeon are paid by the company for the benefit of their servants.

The farms, which have been long in cultivation, with other erections, are offered for sale at twenty years' purchase on the estimated annual value.

The uncultivated land will be sold in lots of fifty acres and upwards, at £1 per acre; each £50 paid in England entitling the purchaser to a choice, and a free passage; and each lot will include a right of pasturage for stock on adjoining land until required for sale. [For changes see Supplement.]

Among other institutions in the colony there is a *Savings' Bank* at Sydney; an *Australasian Colonial and General Life Assurance and Annuity Company*, whose head establishment is in London; a *Sydney Fire Insurance Company*; a branch of the *Imperial Fire Insurance Company* of London; an *Australian Gas Light Company*, with a capital of £45,000; a *Hunter River Steam Navigation Company*; a *Sugar Company*, and other public associations, which are well managed, and conducted with a degree of probity unsurpassed in any other community in the British empire.

The following brief chronological record illustrates the rise and growth of this remarkable section of the British empire:—

1789, one year after the establishment of the colony, *first* harvest reaped (at Parramatta): 1790, *first* settler (a convict) took possession of the land allotted him; 1791, *first* brick building finished; 1793, *first* purchase of colonial grain (1,200 bushels) by government; 1794, *first* church built; 1800, *first* copper coin circulated; 1803, *first* newspaper printed; 1804, Fort William built; 1805, *first* vessel built; 1810, *first* census, free school, toll-gates, police, naming of the streets, establishment of Sydney market, races, and race ball; 1811, *first* "pound;" 1813, *first* fair; 1815, *first* steam-engine; 1817, supreme court established, and *first* bank; 1818, benevolent society formed; 1819, orphan institution founded; 1820, *first* spirits distilled, and *first* colonial tobacco sold; 1821, *first* Wesleyan and Roman Catholic chapels built; 1822, freedom of the press granted, and *first* agricultural and reading societies formed; 1824, charter of justice granted, Legislative Council appointed by the crown, and *first* court of quarter sessions held; 1825, *first* criminal jury im-

pannelled, *first* archdeacon ordained, *first* coroner appointed, and *first* constitutional county meeting held; 1827, *first* daily newspaper established; 1829, *first* circuit court opened; 1830, *first* civil jury impanelled, and *first* college founded; 1831, *first* colonial steam-boat launched; 1832, *first* savings' bank instituted; 1833, mechanics' school of arts formed, and a monthly magazine established; 1834, land sold in Sydney at £20,000 per acre; 1835, *first* Protestant bishop of Australia; 1840, Legislative Council (twenty-four elective members, and twelve crown nominees), sheep sold at 1s.6d. each, and thousands "boiled down" for the sake of their tallow; 1842, Sydney incorporated (population about 40,000); money provided for emigration from 1832 to 1849, by the sale of land, one million and a quarter sterling; 1850, sheep in the colony nearly 12,000,000, horned cattle nearly 2,000,000, horses, 150,000, pigs 100,000, population estimated at 250,000, no convicts in the colony, and grant of a representative Assembly; 1851, (May,) discovery of gold in abundance—for results see Supplement.

FUTURE PROSPECTS.—The rapid strides by which New South Wales has acquired its present position, are so extraordinary, as to raise fears for its duration. These fears would be only too well grounded, if the future prospects of this extensive country, and of its increasing population, depended solely on pastoral pursuits. Had New South Wales no agricultural capabilities, no mineral wealth, no fisheries, then indeed might we look forward with melancholy foreboding to the time when her vast pastures would be overthronged, as the epoch which sooner or later must arrive, and mark the period of decadence. But the pastoral age is the primary step in the history of a people possessed of the varied elements necessary to constitute a mighty and permanent empire. The reason is sufficiently evident; the pastoral resources of a newly-discovered region are naturally the most readily available to the settler, who from thence obtains not only present sustenance, but the means of developing the less prominent, but more intrinsically valuable capabilities of the soil.

That the colonists themselves are not disposed to consider their fine country as a vast "sheep walk," or to restrict their energies to the multiplication of flocks and herds, is evident from the facts adduced in the previous pages, and from the tone of their public jour-

nals. The editor of the *Sydney Morning Herald*, in a "leading article," dated 20th October, 1849, on the "Destinies of the colony," states, that according to the ratios of increase which have heretofore prevailed, the number of sheep in New South Wales will, in the year 1857, amount to *thirty-two million*, and the number of other live stock to *five and-a-quarter million*. For the depasturing of these animals, it is estimated an area of 231,000 square miles would be required. It is calculated, that in 1857, the sheep and other stock in New South Wales and Port Phillip, independent of those in Southern and Western Australia, will exceed *one hundred and forty-five million*, and require 875,000 square miles of pasturage, or about one-third the area of the whole island. This is assuming that about four acres are necessary to feed each head of live stock. Making ample allowance for the disturbing causes by which such calculations are affected, the urgent necessity for the production of other staple exports may be considered as sufficiently proved, although, of Australian wool alone (it may be right to add), England could receive for her domestic use and foreign exports, at least one hundred million pounds.

The first steps in the progress from the nomadic to the agricultural state, have been taken; New South Wales now not only grows sufficient grain for the consumption of her own people, but has become an exporting country; five years ago, its vineyards covered only 500 acres, now they extend over 1,000; and the wine made from them has increased, within the same period, from 30,000 to 100,000 gallons. The colonial mills have increased in nine years from seventy-seven to 172, and the domestic manufactures, in the same period, from fifty to 133. The vine, the olive, and the mulberry—cotton, sugar, and tobacco—hemp, timber, and tallow, may all be produced to an almost incalculable extent in Australia, and are all in constant and increasing demand in Europe. Humanly speaking, therefore, the welfare of this colony rests on a sound basis, and, with the blessing of Divine Providence, its future greatness may seem as marvellous to our descendants, as the position it has already attained appears to those whose lengthened span of life has enabled them to watch its progress from the infant, starving, struggling penal settlement at Sydney Cove, to the flourishing colony of New South Wales. [See Supplement.]

BOOK III.—VICTORIA, OR PORT PHILLIP.

CHAPTER I.

POSITION—BOUNDARIES—HISTORY—TOPOGRAPHY—GEOLOGY—AND CLIMATE.

THIS division of the island-continent of Australia, comprises the extreme southern portion, between the parallels of 37° and 39° S. lat., and the meridians of 141° and 150° E. long. The area is estimated at 97,000 square miles, *i. e.* about 10,000 square miles larger than England, Wales, and Scotland.* The chief harbour was called Port Phillip, after the first governor of New South Wales, when discovered by lieutenant Murray, in 1802. Sir T. Mitchell, who explored the country in 1836, gave it the name of Australia Felix, from the beauty of the scenery; and it is in future to be termed Victoria, in honour of our gracious sovereign.

In the act recently passed by parliament, for separating the district called Port Phillip from the Sydney or Middle District of New South Wales, erecting Port Phillip into a separate province, under the name of Victoria, and granting to the Australian colonies constitutional forms of government, this district is stated to be "bounded on the north and north-east by a straight line drawn from Cape Howe to the nearest source of the river Murray, and thence by the course of that river to the eastern boundary of the colony of South Australia." On the south it is separated from the island of Van Diemen, or Tasmania, by Bass' Strait.

HISTORY.—Captain Cook (of whom fuller mention will be made in the history of New Zealand,) visited the south coast of Australia, near Cape Howe, 19th April, 1770, and proceeded to the northward. After the British settlement was formed at Sydney Cove (Port Jackson) in 1788, attention was directed to a survey of the adjacent southern shores; and, in 1798, Mr. Bass, surgeon of H.M.S. *Reliance*, with a whale-boat and six men, sailed along the south-east coast, doubled the projecting cape termed Wilson's Promontory, entered the strait now called after him, and anchored in a harbour which

he termed Port Western, from its situation with reference to Sydney. His scanty supply of provisions compelled him to return to Port Jackson. The talents and intrepidity of this successful explorer, induced the governor of New South Wales to direct him, together with lieutenant Matthew Flinders, to prosecute the survey in a schooner, built at Norfolk Island, of twenty-five tons burthen. In this small vessel, named the *Norfolk*, these gallant officers sailed, in October and November, 1798, through Bass' Strait; and, as noted at p. 368, demonstrated the insularity of Tasmania. In March, 1802, lieutenant Murray, in command of H.M. brig *Nelson*, a vessel of sixty tons burthen, in which lieutenant Grant had sailed from England to Australia, entered a large harbour a little to the westward of Port Western; and a few weeks after, captain Flinders, in H.M.S. *Investigator*, visited the same noble haven, which received the name before-mentioned from captain Hunter, R.N., then governor of New South Wales, in honour of his esteemed predecessor. Flinders described the coast as "a grassy country, capable of supporting much cattle, though better adapted for sheep."

While captain Flinders was exploring the coast adjacent to Port Phillip, he fell in with captain Baudin, a French naval surveyor, who had given the name of *Terre Napoleon* to a considerable portion of the south coast previously visited by Flinders. His Majesty's government, probably with a view to prevent a French colony being there formed, and at the instigation of Flinders, determined, in 1803, to found another penal settlement at Port Phillip; and colonel Collins, of the royal marines, was sent from England with a fleet of convicts and a military guard. He reached his destination, and landed at Point Nepean, in 1804. Mr. Grimes, then surveyor-general of New South Wales, was despatched from Sydney to make a survey of the port; but he was evidently

* England, 50,400; Wales, 7,500; Scotland, 30,300; total, 88,200 square miles.

unfit for the duty assigned him; for he failed in discovering the river Yarra Yarra, and obtained water only by sinking wells in the sand.

Lieutenant-governor Collins, despairing of success, and finding that many of the convicts were endeavouring to escape by taking to the woods, re-embarked the prisoners and their guard, and proceeded to the Derwent river, in Van Diemen's island, where he landed, and in conjunction with lieutenant-colonel Patterson, who had been sent from Sydney, founded the settlement now known as Hobart Town. For twenty years from this period this portion of Australia was neglected. In 1824 Messrs. Hovell and Hume made an overland journey from Appin in Cumberland county, New South Wales, to the southward and westward, crossed the Murrumbidgee river, and after a severe and perilous journey, reached the sea coast, at a bay called Geelong by the natives, on the 16th of December, 1824. Geelong Bay forms the western portion of the haven of Port Phillip. In consequence of the representations of these gentlemen, the governor of New South Wales, in 1826, sent captain Weatherall, R.N., with a party of soldiers under captain Wright, to take possession of Western Port, and form there a station which might attract settlers. A small fort was erected at the east extremity of Phillip island, which lies across the mouth of the port, and the projected settlement was made upon the mainland of the opposite shore. Captain Weatherall reported that coal was to be found in the vicinity of the station, both on Phillip Island and at Cape Patterson; but although the description of the place was favourable, no settlers resorted thither, and in about two years the military and naval force was recalled, and the station abandoned. To the colonists of Van Diemen's Land is due the credit of having commenced the permanent settlement of Port Phillip. The colony which had been founded at the Derwent river, on the southern shores of Van Diemen's Island, in 1804, gradually extended to the river Tamar, at Launceston, on the northern shores of the island; and whaling establishments were formed in Bass's Strait, whence excursions were frequently made to the adjacent shores of Australia. The whalers, more intent on fishing than grazing, paid little attention to the Port Phillip shores, but rumours of a favourable character respecting a fine, grassy country reached the flock-owners of Van Diemen's Land, who

began to feel straitened for sheep pastures. At Two-fold Bay, a little to the northward of Cape Howe, an extensive cattle station was established by the Messrs. Imlay, from Sydney; and in 1834 a whaling station was fixed at Portland Bay by the Messrs. Henty, from Launceston. In April, 1835, six Launceston settlers, Messrs. S. and W. Jackson, John Pascoe Fawkner,* Marr, Evans, and Lancy, formed themselves into an association to proceed with their families and stock to the opposite shores of Port Phillip. It was necessary to send for a suitable vessel to Sydney; in the mean time their intention was made known, the proposition was favourably viewed, and became the absorbing topic of the day. Mr. John Batman, descended from European parents, and born at Paramatta, but then a settler in Van Diemen's Land, New South Wales, resolved to take the lead in this novel enterprise:—on the 12th of May, 1835, he embarked, with seven semi-civilized natives of New South Wales, in a small vessel at Launceston, Van Diemen's Land, and directed his course to Port Phillip, distant from the mouth of the Tamar 190 miles. Arriving at Port Phillip (called Iranmor by the natives), Batman landed, and on the day after his arrival met with a party of the aborigines on the banks of the Weirabee (the river Ex of the colonists),† to whom he explained that he intended for the future to reside among them, with his wife and seven daughters, and that he wished to purchase some of their land for depasturing his stock; and he presented them with blankets, tomahawks, knives, scissors, looking-glasses, and necklaces. The aborigines appeared disposed to entertain his proposition; he remained a month at Port Phillip, and seems to have conducted himself with considerable tact as well as good feeling,—he induced the natives to cede to him, his heirs, and successors, a tract of country “extending across from Geelong harbour about due south for ten miles, more or less, to the head of Port Phillip, taking in the whole neck or tract of land, and containing about 100,000 acres.” For this he agreed to render in return “a yearly rent or tribute of fifty pair of blankets, fifty knives, fifty tomahawks, fifty pairs of scissors, fifty looking-glasses,

* Credit is due to this gentleman for establishing the first newspaper in Port Phillip; it was issued in manuscript, but subsequently printed in a foolscap form, and is now (1850) a flourishing daily paper.

† See *Information on Australia Felix in 1840*, by George Arden, Esq., then the able editor of the *Port Phillip Gazette*.

twenty suits of slops or clothing, and two tons of flour." The deed of assignment was signed by Jaga-Jaga, Cooloolack, Bungarie, and others, eight of the natives, with a mark x. By another deed Batman purchased "all that tract of country situated and being at Port Phillip, running from the branch of the river at the top of the port, about seven miles from the mouth of the river forty miles north-east, and from thence westerly forty miles across Iramnoo Downs or Plains, and from thence S.S.W. across Mount Vilmarnatar to Geelong harbour, at the head of the same, and containing about 500,000 acres, more or less." For this Batman agreed to pay to the eight aborigines as annual rent or tribute, "100 pair of blankets, 100 knives, 100 tomahawks, fifty suits of clothing, fifty looking-glasses, fifty pairs of scissors, and five tons of flour." These deeds were signed and exchanged "on the banks of Batman's Creek, 6th of June, 1835." Batman promised also to protect the natives, to employ them in the same manner as the New South Wales aborigines, to clothe and feed them. He certainly seems to have gained the good-will of the Port Phillip savages. The total value of his proposed tribute was about £200 per annum. After leaving three Europeans and five New South Wales natives to erect a house, and prepare some ground, Batman re-embarked for Launceston on the 14th of June, and reached the Tamar river in thirty-six hours. On arriving in Van Diemen's Land he proceeded to Hobart Town, where an association, consisting at first of sixteen individuals, was quickly formed for the colonization of Port Phillip. Money was subscribed, and Batman appointed agent for the company.

Previous to departing from Hobart Town for Port Phillip, on his second journey, Batman addressed to colonel George Arthur (then lieutenant-governor of Van Diemen's Land) a letter, dated 25th June, 1835, in which he laid fully before the colonial government the course that he had adopted. He stated that, for the previous six years, he had been most actively employed in endeavouring to civilise the aborigines of Van Diemen's Land; that, under his guidance, the humane objects of the local government towards the aborigines had been carried into effect; that, in 1827, himself and Mr. Gellibrand had addressed a joint letter to the government of New South Wales, soliciting permission to occupy land at Port Phillip or Western Port, and to export stock

thither to the value of £5,000, to be placed there under his personal superintendence; and that this application was not granted by the government at Sydney, because the land in question was beyond the limits of that territory, and the occupations of Western Port had been altogether abandoned.

Batman, in his letter to governor Arthur, stated, that he confidently trusted the British government would duly appreciate the treaty he had entered into with the aborigines—would not, in any manner, molest the arrangements he had made, and that he should receive the support and encouragement, not only of the local government, but also that of his Majesty's ministers, in carrying the objects into effect. Finally, he described the country in the following terms:—

"I traversed the country, in opposite directions, about fifty miles, and having had much experience in lands and grazing in New South Wales and in this colony, I have no hesitation in asserting, that the general character of the country is decidedly superior to any which I have ever seen. It is interspersed with fine rivers and creeks, and the downs were extended, on every side, as far as the eye could reach, thickly covered with grass of the finest description, and containing an almost indescribable extent of fine land, fit for any purposes."

Governor Arthur, in a letter, dated Government-house, Van Diemen's Land, 4th July, 1835, transmitted copies of Batman's letter and deeds of transfer with the natives to the secretary of state for the colonies, soliciting that he might be "made acquainted, at an early period, with the views which his Majesty's government entertained upon this very important subject." The governor added, that Mr. Batman was an enterprising settler, that he had acted with prudence as well as humanity in his intercourse with the aborigines, but that it was doubtful whether a migratory savage tribe, consisting of thirty or forty individuals, roving over an almost unlimited extent of country, could acquire such a property in the soil as to be able to confer upon the purchaser the right of possession which would be recognised in our courts of law. The governor further hinted to his Majesty's secretary of state, that the land had been taken possession of, for the crown, by colonel Collins, previous to the settlement of Van Diemen's Land, and subsequently by captain Wright, in 1826. He also stated, that the formation of a colony at Port Phillip would be highly advantageous to Van Diemen's Land; that a liberal grant of land would be a well-bestowed gift on Mr. Batman, but that he had informed the explorer

that, with regard to the confirmation of his treaty with the natives, he could not hold out the slightest prospect of its being favourably considered.

Lord Glenelg, then his Majesty's secretary of state for the colonies, replied to governor Arthur's communication of 4th July, 1835, in a despatch, dated Downing Street, 23rd January, 1836. His lordship therein stated, that he would not then enter into the question of the right possessed by the chiefs who were the contracting parties to the territory of which they agreed to dispose, or of the justice and fairness of the arrangement, but would simply advert to the practical question at issue, namely, the expediency of confirming the grant to an association. All schemes for making settlements by private individuals or companies in the unlocated districts of Australia, had of late years been discouraged by his Majesty's government, as leading to fresh establishments, involving the mother country in an indefinite expense, and exposing both the natives and the new settlers to many dangers and calamities. His lordship added—"And there is so much of prudence and of justice, and, I think I may add, of humanity, in this policy, that I do not feel disposed to depart from it in the present instance. The conduct of Mr. Batman towards the natives has been such as to make me regret that I find it my duty not to advise his Majesty to sanction the proceedings of that gentleman and his associates."

Lord Glenelg concluded by saying, that the proposition of forming a settlement in the vicinity of Port Phillip, and of placing it under the jurisdiction of the supreme court of Van Diemen's Land, seemed open to some very serious objections; but it should receive every consideration. Meanwhile Batman, who appears to have anticipated a more favourable reply, proceeded to a minuter survey of the vast estates he considered himself to have purchased, and selected for his own residence the central position of Indented Head, situated about fifteen miles from the entrance to Port Phillip, and commanding a beautiful and extensive prospect. While these events were occurring, the six Launceston settlers, headed by Messrs. Jackson and Fawcner, had procured their vessel from Sydney, which they denominated the *Enterprise*. In this they embarked with their families and live stock, but a gale of wind drove

them back into the Tamar; they again set sail, and reached Western Port, but not considering the land inviting, the *Enterprise* proceeded to Port Phillip, which it reached on the 30th August, 1835. Batman viewed, with a jealous eye, these intruders on his broad domains, and warned them against encroaching on his territories. Threats of legal proceedings induced the Messrs. Jackson to move beyond the limits to which he laid claim, and they settled on a fine tract of pastoral land, situated upon the Salt Water river, (called the Arndell by Hume), about twenty miles above its junction with the waters of the Yarra Yarra river. Fawcner, however, disregarding the minatory proclamations of Batman, took up a position of great beauty and promise on the north bank of the Yarra Yarra, about eight miles by the course of the river, from its junction with the upper termination of the bay.*

The locality thus chosen must have been peculiarly attractive to a pastoral eye: the banks of the river sloped gently to a rising ground, covered with luxuriant grasses; and from the summit of the eminence on the northern bank, the waters of the bay of Port Phillip, distant two miles, were visible to the southward, over the tops of the trees of an intermediate flat. The country, in a northern direction, was of an undulating character, covered with grass and moderately wooded, and the Yarra Yarra rolled its deep and dark waters from the eastward, between banks that were occasionally lofty and picturesque, while the grassy downs were covered with the light-bounding kangaroo and the majestic emu, who enjoyed the fertile region until then undisturbed, save by a few wandering savages.

The Yarra Yarra, at the part where Fawcner fixed his camp, expanded its waters into a basin, well adapted for the reception of shipping. At the upper extremity of this natural dock, a ledge of rocks partially crossed the river, which occasioned a fall in the body of the water, and served to protect the freshness of the upper portion of the stream from the influx of the brackish or salt stream caused by the flood tide. The river pursued a circuitous course to the westward. A salt-water lake, or swamp, skirted its northern bank; and beyond appeared the beautiful valley of the Salt-water river, which united with the Yarra Yarra about four miles above its junction with the bay. In this favourable situation Fawcner com-

* Westgarth's *Australia Felix*.

menced ploughing the ground, and planting his corn and seeds, which in the ensuing harvest yielded him an ample reward. To add to his resources, Fawkner opened a "public-house." Batman, finding how formidable a rival he had to compete with, removed from the inconvenient locality he had previously chosen, at Indented Head, to a spot nearer the camp of Fawkner; and on a beautiful green he opened a general store, to supply the wants of the colonists, who now began rapidly to crowd to this land of promise. That the position of Fawkner was well selected, is evident from its being subsequently chosen by his Majesty's government for the site of the capital of the rising settlement; and the rude log dwellings of Fawkner and Batman are now overshadowed by the handsome buildings of the prosperous city of Melbourne.

To return to the chronological history of the settlement. The intelligence of the fine country round Port Phillip; the knowledge that numerous flocks and herds, belonging to Messrs. Henty and other settlers near Port Dalrymple, Van Diemen's Land, had been conveyed to the opposite coast at Cape Portland, in 1834, where they thrived well, and increased with great rapidity; a failure in the supply of pasturage in the available districts of Van Diemen's Land; and the desire of some to remove from a settlement where bush-ranging convicts made life and property insecure,—these and other causes led to a Port Phillip fever; and many hastened with their flocks and families to the fertile shores from which glowing accounts were daily received at Launceston.

The governor of New South Wales, Sir Richard Bourke, deeming the Port Phillip country within the territories subject to his jurisdiction, issued, with the advice of his executive council, a proclamation, dated Sydney, 26th August, 1835, declaring that the lands in question were the property of the British crown; that all treaties, contracts, or bargains with the aboriginal natives for the purchase of said lands, were "void against the rights of the crown;" and that all persons found in the possession of such lands, without the licence or authority of his Majesty's government, would be considered and dealt with as trespassers. A copy of this proclamation was transmitted, by Sir R. Bourke, to his Majesty's secretary of state for the colonies, on the 10th October, 1835. In this able despatch, the governor pointed out the fallacy of endeavouring to

restrain the population of New South Wales from dispersion; that the very nature of their main pursuit—sheep-farming and depasturing cattle, compelled the colonists to send, yearly, large flocks beyond the existing boundaries of location, to preserve them in health throughout the year, otherwise the settlers must restrain the increase, or endeavour to raise artificial food for their stock. Whilst nature all around presented an unlimited supply of the most wholesome nutriment, either course would seem a perverse rejection of the bounty of Providence, and the latter would certainly require more labour than could be obtained in New South Wales, or than immigration could profitably supply. Sir R. Bourke frankly acknowledged that, independent of these powerful considerations, he was unable to comply with the desire of her Majesty's government at home, "to prevent dispersion." No adequate measures could be resorted to for the general and permanent removal of intruders from waste lands, without incurring probably a greater expense than would be sufficient to extend a large share of the control and protection of government over the country which it was found desirable to occupy. It was on these principles that Sir R. Bourke had, in his despatch of 4th July, 1834, to his Majesty's secretary of state, recommended the propriety of extending in a southern direction, to Twofold Bay, the limits within which, land might be acquired from the crown; but the Earl of Aberdeen, then his Majesty's secretary of state for the colonies, in a despatch, dated 25th December, 1834, did not agree with Sir R. Bourke: his lordship said—"His Majesty's government are not prepared to authorise a measure, the consequences of which would be to spread over a still further extent of territory a population which it was the object of the land regulations to concentrate." This intimation, evidently based on the theory which, in practical working, has been a chief cause of the distress, and fluctuation in the value of property in Australia, compelled Sir R. Bourke to check, as far as possible, the herd and sheep-owners turning "squatters," and naturally seeking for their expanding flocks fresh pastures. His excellency, therefore, could afford no encouragement to a Mr. James Atkinson, who proposed to form a settlement at Twofold Bay, by means of immigrants from the north of Ireland. But, on visiting Twofold Bay, Sir R. Bourke found the greater part

of the vast tract of fertile land lying between the country of St. Vincent and Twofold Bay, depastured by flocks and herds, attended by shepherds and stockmen, the pastures already contributing largely to the wealth of the colony of New South Wales, and exceeding, in importance, many of the districts where land was then (1834-5) disposable by sale or on lease. Many considerations rendered the governor unwilling to oppose the settlement of Twofold Bay in 1834, and now, in October, 1835, induced him to intimate to his Majesty's secretary of state, that "it would be more desirable to impose reasonable conditions on Mr. Batman and his associates, than to insist on their abandoning their undertaking." His excellency therefore proposed, in this despatch of 10th October, 1835, that a township be marked, both at Twofold Bay and in some eligible spot on the coast to which Mr. Batman's party had proceeded. The town allotments, and a portion of the adjoining territory, might then be declared open to location, according to the existing regulations; and purchasers of land would probably soon be found. Finally, his excellency remarked, that dispersion would go on notwithstanding discouragement, and would be accompanied by much evil that might be prevented by the guidance and control of authority opportunely introduced; and his Majesty's government ought not to delay taking some measure in assertion of the rights of the crown over these lands.

The conclusive reasoning of Sir R. Bourke seems to have produced an excellent effect on Lord Glenelg, then his Majesty's secretary of state for the colonies, who had also been addressed, on the 26th January, 1836, by Mr. George Mercer, of Edinburgh, as shareholder in and agent for the "Geelong and Dutigalla Association," who urged a crown grant of the territories purchased by Batman and Swanston, at Port Phillip, being conceded to them. Lord Glenelg, in a despatch to Sir R. Bourke, dated Downing-street, 13th April, 1836, admitted that there were physical impediments in Australia to the close concentration of the inhabitants (contemplated by the land regulations of 1831), with which it would be futile to contend by human laws, and that the principle of counteracting dispersion, when reduced to practice, must unavoidably be narrowed within the limits which the physical peculiarities of a colony dictate and require. New South Wales, he added, was marked

by nature for a pastoral country; the age of manufacturing industry was of course remote; and the quality of the soil inevitably separated the shepherds and herdsmen, and all their associates in labour, very widely from the general seat of government, and from each other. It was therefore wholly vain to expect that any positive laws, especially those of a very young and thinly peopled country, would be energetic enough to repress the spirit of adventure and speculation in which the unauthorised settlement at Port Phillip had originated. Lord Glenelg therefore expressed his general concurrence in the views entertained by Sir R. Bourke, and sanctioned his acting on them in the manner proposed. In concluding his despatch, Lord Glenelg, with his wonted candour, thus expressed the enlarged views, a consideration of which had influenced him in arriving at his present decision:—

"The motives which are urging mankind, especially in these days of general peace and increasing population, to break through the restraints which would forbid their settling themselves and their families in such situations, are too strong to be encountered with effect by ordinary means. To engage in such a struggle would be wholly irrational. All that remains for the government in such circumstances, is to assume the guidance and direction of enterprises, which, though it cannot prevent or retard, it may yet conduct to happy results. It may indeed admit of serious doubt, whether the settlers at Port Phillip and Twofold Bay have not, in reality, given birth to undertakings which deliberate reflection would have recommended rather than discouraged. Each of those places will probably, at a time more or less distant, form the nucleus of a new and flourishing settlement, interchanging with the districts at present occupied in the vicinity of Sydney many articles of internal commerce, and contributing to expedite the general occupation, by the people of this kingdom or their descendants, of those vast territories in which our national wealth and industry have already, in the last half century, converted an unproductive waste into two great and flourishing provinces. In producing and multiplying such results as these, it has, I believe, always occurred, and is perhaps inevitable, that the sanguine ardour of private speculation should quicken and anticipate the more cautious movements of the government."

While the local and home governments were engaged in considering the fittest course to be pursued, a stream of colonists was pouring into Port Phillip, and several co-partneries or associations were formed. The Port Phillip Association merged into the *Derwent Company*; a *Clyde Company*, promoted chiefly by captain Wood, occupied the fine pastures around the site of the present town of Geelong; about the middle of 1836, one year after the first location, 35,000 sheep had arrived from Van Diemen's

Land and pastoral stations spread over the plains around the Salt Water river, the Weirribee, the Barwon, and the Leigh. The settlers being at a remote distance from each other, and occasionally in the vicinity of native tribes, had large bells at their stations for sounding an alarm when in want of aid.*

In June, 1836, Mr. Stewart, a magistrate, arrived at Port Phillip, as the representative of her Majesty's government: he had been despatched thither by Sir R. Bourke, from Sydney, with instructions to ascertain the capabilities of the place, and to proclaim the invalidity of all purchases of land from the aborigines without the previously obtained sanction of government. He found that 177 persons from Van Diemen's Land had already settled in the neighbourhood of the bay, and had brought with them live stock and other property to the amount of £110,000. At this period Messrs. Batman and Fawkner had come to a mutual understanding on their respective claims, and appointed a much-esteemed fellow-colonist (M. J. Simpson) as an umpire in all disputes.

The claims for the land purchased from the aborigines by Mr. Batman and of the Van Diemen's Land Association, with whom he co-operated, were submitted to the late Mr. Burge, Q.C., who had specially studied the subject of colonial law. The questions proposed, were:—(1.) Whether the grants obtained by the association were valid? (2.) Whether the right of the soil is, or is not, vested in the crown? (3.) Whether the crown could legally oust the Association from their possessions? Mr. Burge gave his opinion at considerable length: the substance of it was, that the grants obtained by the Association were not valid, and that as between Great Britain and its own subjects, as well as the subjects of foreign states, the right to the soil was vested in the crown, by virtue of prior discovery. Mr. Pemberton and Sir William Follett said they entirely concurred in the conclusions of Mr. Burge, as expressed in his

* Some settlers when landing sheep at Port Phillip, perceived a man of great size, differing from the aboriginal natives, but scarcely distinguishable as a European, seated under a tree, watching the shepherds with a listless gaze. When accosted, he seemed to be roused from his lethargy, and was observed to repeat slowly the words uttered, as if memory was seeking to bring back some long-forgotten ideas. He gradually acquired the power of expressing himself in English, when it was ascertained that he had originally been a private soldier, named Buckley, and had been transported for striking his superior officer; was in the fleet sent out to Port

“extremely able and elaborate opinion.” This terminated the existence of the Van Diemen's Land Association, and of other companies formed for the colonization and appropriation of the lands of Australia Felix. The members of these companies were, however, allowed, in consideration of their payments to the aborigines, a remission to the extent of £7,000, of the purchase-money of whatever lands they might choose to purchase in Australia Felix from the crown.

Mr. Gellibrand, a legal practitioner of repute, and attorney-general for Van Diemen's Land, was one of the principal supporters of Mr. Batman; he proceeded to Port Phillip, in 1837, to protect the rights of the Van Diemen's Land Association, but in an excursion of exploration from Geelong towards the sources of the Barwon river, this unfortunate gentleman, with a Mr. Hesse, perished. He is said to have been murdered near the mission settlement of Buntingdale, by the aborigines; in 1839 Mr. Hawdon was shewn an European skull of highly intellectual formation, which was supposed to have been that of Mr. Gellibrand. On the back of the skull were the marks of two blows apparently inflicted by a tomahawk.

The value of the newly occupied territory had hitherto been known to few besides the settlers themselves, and even they were acquainted with little beyond the immediate neighbourhood of that portion of which they had taken possession; but after the journey from Argyle county, in New South Wales, accomplished by Messrs. Hovell and Hume, in 1824–5, favourable reports of the country became more widely circulated; to the exertions, however, of Sir Thomas Mitchell, is due the credit of establishing the route and laying open this region to settlers. In 1836 the surveyor-general having (during a journey related in a previous chapter) traced the junction of the Lachlan with the Murrumbidgee, and of the Murrumbidgee with the Murray, returned homewards along the left

Phillip with Colonel Collins in 1803, and, thirty-three years previous, had effected his escape when Collins landed his prisoners. Buckley had lived among the natives, and had “entirely dismissed the outward characteristic of a civilized being;” he was extremely reserved and uncommunicative in his manners. Mr. Batman took care of the unfortunate man, governor Arthur granted him a pardon, and he was appointed a constable at the new city of Melbourne; but, on expressing a reluctance to remain in the scene of his savage life, he was transferred to Hobart Town. Mr. Logan took an active interest in protecting the reclaimed man.

or southern bank of the latter river to the confluence of the Goulburn, Hovel, or Bayunga. Sir Thomas then quitted the Murray, and in lat. 36° S., long. 144° E., struck off in a southwest direction, when he entered a country which he describes his expedition as having traversed in two directions with heavy carts, meeting no other obstruction than the softness of the soil, and in returning over flowery plains and green hills fanned by the breezes of early spring. "I named this region *Australia Felix*, the better to distinguish it from the parched deserts of the interior country, where we had wandered so unprofitably and so long."

The official reports of Sir Thomas Mitchell, confirming, as they did, the glowing accounts of the immigrants from Tasmania, increased the desire for locations at Port Phillip; large herds of cattle, and flocks of sheep were driven from the old settled districts of New South Wales, into the new region; and in April, 1837, on the arrival of Sir R. Bourke, the governor of New South Wales, to inspect the place, it was found to contain 150 horses, 2,500 horned cattle, 140,000 sheep, and 450 colonists. The town (now city) of Melbourne was laid out in the form of a parallelogram, one mile in length, by three quarters of a mile in breadth, along the banks of the Yarra Yarra river. The first land sale took place in June, 1837; as the government required gold in payment for the land, and there were but few possessed of the precious metal, the lots were then sold at from £30 to £100 per half acre. The value of these town sections rapidly increased; at a sale by auction, in 1839, three half-acre sections realised the enormous sum of £10,250—and the purchaser made money by his bargain, as he cut up the sections into several small lots, to meet the great demand for building applotments. Speculation was carried to a great height. Up to the end of 1841, government sold, chiefly by public auction, 205,748 acres of land, and realised for it no less than £394,353. In 1837, the sales of town allotments in Port Phillip district, amounted to £7,245; in 1838, to £8,746; in 1839, to £8,988; in 1840, to £79,168; in 1841, to £4,028; total, £108,177. Of these sums, £4,576 were for town lots in Geelong, £11,026 for ditto in Portland, £7,638 for ditto in Williamstown, and the remainder for Melbourne. The country and suburban lands in the Port Phillip dis-

trict, previous to the introduction of the uniform price system, from 12th September, 1838, to 15th October, 1840, amounted to £231,526, viz.—in 1838, £25,286; in 1839, £60,964; in 1840, to October, £145,272. In 1839 sheep sold at £3 to £3 10s. each, cattle at £12 to £15, and ordinary saddle horses for upwards of £100 each. Flour rose to £80 and even £100 per ton of 2,000 lbs. weight, the common four lb. loaf was sold for 3s. 6d. Ten shillings a day was no unusual remuneration for the ordinary descriptions of labour, and cottages of four rooms, with very moderate pretensions to appearance or accommodation, were let at an annual rent of £150 to £200. Vessels hastened to "*Australia Felix*" from every quarter of the globe, and at the port of Melbourne, less than three years after the foundation of the colony, 130 vessels were seen at anchor in one day.

It was about this period, I believe, that Sir G. Gipps, then governor of New South Wales, informed her Majesty's government that the road to Melbourne might be tracked for miles by champagne bottles; and there is a story of two bullock-drivers who, at a country "public house," on their way to Melbourne, called for a dozen of champagne, emptied the bottles into a bucket, and then deliberately commenced drinking the frothing wine from tin panikins.

Such a state of things could not last; in 1841 the reaction commenced, increased in 1842, and in 1843, sheep which but four years previous had been bought at £3, were sold for 1s. 6d. Cattle fell from £12 to 12s. each, and other things in proportion. The insolvencies were all but universal. At Melbourne there were in 1842, 113; in 1843, 124; in 1844, 45. Total, 282. The colony sustained during this commercial crisis great destruction of property; it is now recovering. Port Phillip, or Victoria, at present contains a population of nearly 50,000, and its live stock in 1849 consisted of 17,000 horses; 400,000 horned cattle; 5,200,000 sheep; and about 6,000 swine.*

In 1839, her Majesty's government created the Port Phillip district a dependency of New South Wales, and appointed Charles Joseph La Trobe, Esq., superintendent, or lieutenant-governor of the same, under the directions of the governor of New South Wales. The authority of the superintendent was generally exercised more in *surveillance* than command, for he stood in the same

* Progress since gold discoveries, in Supplement.

relation to the governor of Sydney as the latter stands with respect to the secretary of state for the colonies. The supervision of the departments of the treasury, survey, customs, post office, sheriff, and clerk of the crown, were ordered to be exercised through the chief functionaries at Sydney; but the judicial, marine, police, and protectorate of aborigines, were independent of the authorities at Sydney. Separate statistics were ordered to be kept, as far as possible, of the Port Phillip district, and in the previous book on New South Wales, the returns of the two divisions of the province will be found combined or separate. The Port Phillip district was authorised to send six representatives to the Legislative Council at Sydney. As the population and wealth of Melbourne and the surrounding country increased, the colonists objected to the district continuing longer associated with New South Wales; they sought the control of their own local affairs, petitioned the home authorities for a separation from the Sydney district, sent home an active and intelligent gentleman (Mr. Cunningham) to represent their views to her Majesty's government, and finally refused to send representatives

to the Legislative Council at Sydney, alleging that they could not find independent and properly qualified persons to travel a distance of 600 miles, and reside at Sydney for six months in the year, in order to give attention to the affairs of the Port Phillip district. Desirous of marking the impossibility of continuing the existing state of things, the electors at Melbourne elected Earl Grey, her Majesty's secretary for the colonies, as their representative for the New South Wales Legislative Council. This does not appear to have been done from any feeling derogatory to the noble lord, but simply to show their inability to obtain any fitting representative on the spot. The secretary of state (see page 550) complied with the urgent request of the colonists of Port Phillip, and an order in council, as previously stated (page 554), decided on the erection of the Port Phillip district into a separate colony, to be called after our gracious sovereign *Victoria*, and to be ruled by a governor, aided by a Legislative Council, partly nominated by the crown, and partly elected by the colonists, the proportion being one-third nominees to two-thirds elected representatives. Such are the provisions of the act passed by parliament.

[This chapter was written in 1850—for subsequent history, statistics, and gold discoveries, see Supplement.]

CHAPTER II.

BOUNDARIES—AREA—PHYSICAL ASPECT—MOUNTAINS—RIVERS—LAKES—HARBOURS
—COUNTIES—TOWNS—GEOLOGY—MINERALOGY—SOIL AND CLIMATE.

THE north-east limits of Victoria are defined by a line bearing north-west from Cape Howe to one of the branches of the Murray river, which divides the province from Auckland county and Maneroo Plains, in New South Wales; the *northern* boundary is formed by the Murray river to the frontier of South Australia, in the meridian of 141° E.; the *western* by a line bearing south to the Pacific Ocean, along the South Australian frontier; and the *southern* by Bass's strait, which separates Van Diemen's island or Tasmania from Australia. The length of the province from east to west is about 500 miles, the breadth from north to south about 250 miles, the coast line about 600 miles, and the area about 80,000 square miles

= 51,200,000 acres, it is therefore about equal in size to Great Britain.

PHYSICAL ASPECT.—The province throughout its whole extent presents great diversity of feature, from the lofty alpine region on the east, to the low grassy plains in which it terminates on the west; while its coast line, indented in some parts by picturesque bays and capacious havens, is in others monotonous in the extreme, a long tract extending between Cape Howe and Lake King, called by the colonists the "Ninety Mile Beach," being almost unbroken by inlet or cove. But the peculiar characteristic of Victoria is the large proportion of fertile, accessible, and comparatively level ground comprised within its limits, not-

withstanding the mountain chains and ridges of various extent and considerable elevation by which it is traversed. The whole territory is, generally speaking, well watered. The Murray, which rises in the Australian Alps, receives in its course various other rivers which flow over extensive plains in directions nearly parallel to its own, and thus irrigate and fertilize a great extent of rich land.

Hills of moderate elevation occupy the central country, being thinly or partially wooded and covered with the richest pasturage. The lower country, both on the northern and southern skirts of these hills, is chiefly open; and on the south undulates slightly towards the coast. The grassy plains which extend northward from these thinly wooded hills to the banks of the Murray, are chequered by the channels of many streams falling from them, and by the more permanent and extensive waters of deep lagoons, which are numerous on the face of these plains, "as if," says Sir Thomas Mitchell, "intended by a bounteous providence to correct the deficiencies of a climate otherwise too dry for an industrious and increasing people, by preserving in these abundant reservoirs the surplus waters of the large river; and indeed a finer country for cattle stations than this can scarcely be imagined."

In the western portion small rivers radiate from the Grampians, an elevated and isolated mass, presenting no impediment to a free communication through the fine country around its base. Hence the enormous labour necessary in order to obtain access to some parts, and for crossing continuous ranges to reach others, by passes like those so essential to the prosperity of New South Wales, may be in great measure dispensed with in Victoria. Towards the sea-coast on the south, and adjacent to the open downs between the Grampians and Port Phillip, there is a low tract of very rich black soil, apparently the best imaginable for the cultivation of grain in such a climate.*

MOUNTAINS.—The principal chain of mountains in Victoria, designated by Mitchell the *Australian Alps*, but known also as the great Warragong chain, or Snowy mountains, are a continuation of the dividing range (see p. 433) whose progress as far as Mount Kosciusko has already been delineated. Commencing from that point, and continuing the description on the au-

thority of Count Strzelecki, we find the chain resuming a south-west direction, and still maintaining a bold though less elevated outline. Its intricate branchings on either side, with their peaked summits, render the country rugged and sterile, excepting the neighbourhood of Lake Omeo, and a part of the Mitta Mitta valley, lying between the spur crowned by Mount Yabbara, and that surmounted by Mount Ajuk, a tract resembling a vast basin, without trees, and scantily supplied with water, but covered, even during a parching summer, with luxurious pasture. The whole region westward of the chain, towards Western Port, is rent by narrow gullies, rendered well-nigh inaccessible, either by the steepness of the ridges by which they are flanked or the thickly interwoven underwood. Eastward of the chain, in the direction of Corner Inlet, the country presents very different features. In 37° S. lat., or about the sources of the river Thomson, the spurs are less ramified, and of considerable height and length, shaping the intermediate ground into beautiful slopes and valleys, which ultimately resolve into an open and well-watered plain, clothed with nutritious grasses, adorned with fine timber, and offering charming sites for farms or country residences. The spur which bounds the southern limit of that area, and another, which, on the western side of the chain, studs the territory of Australia Felix, and the neighbouring district of Western Port, with some remarkable eminences, again change the face of the country, and constitute a broken inhospitable region, frequently unsupplied with water, and almost always ill furnished with either quadrupeds or birds.

In the vicinity of *Coroner Inlet* (Gipp's Land), the chain of mountains dips under a low and marshy ground, above which its crest appears rising only at intervals. Ten miles beyond, it is seen again, erect, jutting out boldly into the sea, and exposing its granitic flanks for a length of thirty miles to the lash of the infuriated surf.

At *Wilson's Promontory*, the sea interferes with the visible continuity of the range, but does not terminate its course, which in clear weather may be traced from the headland by the chain of islands in Bass's Straits. These islands, whether high and crowned with peaks, or low and crested only by the white sparkling foam of the sea, appear, in their winding and lengthened array, like the glittering snow-capped domes of the

* Mitchell's *Expeditions into Australia*

Andes, when seen above the dense clouds which encompass their lower region.* The Australian Alps cover an area of about 7,000 square miles.

The *Grampians* form the leading features of the country westward of Port Phillip—they are a lofty and extensive mass comprising three ranges, and covering a surface which extends latitudinally fifty-four miles, and longitudinally twenty miles. The extreme eastern and highest summit is Mount William, in height 4,500 feet above the sea. The most northern point is Mount Zero, in $36^{\circ} 52' 3''$ S. lat. The most southern, Mount Sturgeon, in $37^{\circ} 38'$ S. lat., rises 1,070 feet above the level of the plain, from which it springs like a perpendicular rock from the midst of the ocean. The most northern and elevated range extends from *Mount William* to *Mount Zero*, and is steepest on the northern side. From this hill the two other ranges branch off to the south, the western being named by Mitchell the *Victoria range*, and the eastern the *Serra*, from its serrated outline. On the slopes of the northern range are some forests of fine timber, but, in general, the higher summits are bare and rocky. Mount Abrupt, the south-eastern extremity of the Grampians, is 1,700 feet in perpendicular height; it contains a crater of 446 feet in breadth, the average depth being eighty feet. Mitchell describes the prospect he beheld from the summit as a truly sublime scene, the whole of the mountains quite clear of clouds, the grand outline of the more distant masses blending with the sky, and forming a blue and purple background for the numerous peaks of the range on which he stood, and which consisted of sharp cones and perpendicular cliffs foreshortened, so as to form one feature only of the extensive landscape, but composing a crescent nearly thirty miles in extent; this range being but a branch from the more lofty masses of Mount William, which crowned the whole. The view includes a vast extent of open plains fringed with forests, and embellished with lakes. "Certainly," says Sir Thomas, with an enthusiasm very natural under the circumstances, "a land more favourable for colonization could not be found. Flocks might be turned out upon its hills, or the plough at once set agoing in the plains. No primeval forests require to be first rooted out here, although there was enough of wood for all purposes of utility, and adorning the

country just as much as eye could wish."† Mount Arapiles lies to the north-west of Mount Zero. This mass, the western extremity of which has somewhat the appearance of a ruined fortress, consists of a sandstone passing into quartz. It occupies an area of about two square miles, and may be easily recognised, both by its isolated position, and by its small companion, the Mitre rock, situated midway between it and the lake to the northward, named Mitre lake. The highest summit of Mount Arapiles is 726 feet above Mitre lake.

Thirty or forty miles to the eastward of the Grampians is a granitic range called the *Pyrenees*, thinly wooded with very lofty timber, and grassy to their summits; they terminate, to the southward, in Mount Cole.

About fifty miles to the eastward of the Pyrenees is a range called the *Bunninyong*, or *Brisbane range*, running north and south, and traversing nearly a degree of latitude.

The *Mount Macedon range* commences about thirty-five miles north-north-west of Melbourne. Mount Macedon, properly so called, is one of the principal mountains in the province, clothed with trees (chiefly black butt and blue gum eucalypti), measuring from six to eight feet in diameter to its very summit, about 3,000 feet high, which is spacious, easily accessible, even on horseback, and covered, towards the south, with the tree-fern, musk, and other plants found at the Illawarra, New South Wales. Mounts Campbell and Byng are two conspicuous eminences to the northward, which, with Mount Macedon, form the figure of a triangle—the latter being the apex, the former marking the extreme points of the base line to the north-east and north-west.

Mount Hope (considerably to the north of Mount Byng) belongs to a group of low granitic hills, of which it forms the western extremity. It is composed of immense blocks of granite, and obtained its name from Sir Thomas Mitchell, who after several months spent in traversing the dead levels of the interior, hoped from its summit to obtain an extensive view of the region between him and the coast. How much the prospect exceeded his highest expectations, may be readily conceived, for the fair and fertile region he then beheld, was that which he afterwards designated Australia Felix. *Pyramid hill*, about six miles from Mount Hope, rises about 300 feet above the plain, in the form of a tri-

* Strzelecki's *New South Wales*.

† *Expeditions into Australia*.

angular pyramid, and being quite isolated, closely resembles the monuments of Egypt. Its apex is formed by a single block of granite. To the northward of Portland bay (in the county of Normanby) a range of inconsiderable extent and elevation, called the *Rifle Range*, is chiefly characterised by its lofty timber and numerous swamps. Along the coast, to the eastward of Cape Otway, is a range called the *Marrack hills*, of which comparatively little is known, from the impenetrable character of its luxuriant vegetation. *Station peak*, the highest point of the Vilemanata range, is a well known landmark in the harbours of Port Phillip and Geelong. The mountain is accessible on every side, and is remarkable for its picturesque beauty.* Besides the chains above mentioned, there are *Strzelecki range* in Bass county, Western Port district, the *Mamaloid hills*, and other groups and detached mountains alluded to in the geological section. The prevailing line of the mountain ranges, when viewed at a distance, is a deep grey; on a nearer approach every variety of hue is agreeably blended.

RIVERS.—The streams which irrigate Victoria are generally deeper and more constant in their course, than those of the older colony, unless, indeed, we except the more recently discovered streams in the northern districts of New South Wales. The noble river which forms three parts of the eastern and northern boundaries of the province, is known as the *Hume* in the early part of its course, after receiving the waters of the *Ovens* and the *Goulburn*, the *Campaspé*, the *Loddon*, and various smaller tributaries, it pursues a north-easterly course to its junction with the *Murrumbidgee*, from which point to its sea mouth, Lake Alexandrina, in South Australia, it is called the *Murray*.† The earlier portion of its course is that with which we are at present concerned, and to avoid the repetition of the two names—*Murray* or *Hume*—it may be well to speak of it, during this portion of its course, by the latter appellation only. The basins of the *Hume* lie in the deepest recesses of the Australian Alps, and its immediate tributaries having also their sources among the *Snowy mountains*, it is supplied

* Recent information concerning *Australia Felix*, by G. Arden, Esq.

† Several writers on Australia speak of this river by the name of the *Murray* only, and some confusion is certainly apt to arise in the minds of readers not intimately acquainted with the subject, from its bearing different names in different places, yet this does

from them with never-failing streams, and enabled to support a continuous volume, whose strength is manifested by its having forced a channel through a portion of the desert interior, instead of spreading over extensive plains, or being lost among morasses, like several other northern streams. I have, I believe, elsewhere quoted the remark of Sir Thomas Mitchell, that “each Australian river seems to have some peculiar character, sustained with remarkable uniformity throughout the whole course.” That of the *Hume* appears to consist chiefly in the vast extent of alluvial margin, the lofty trees, and still lakes, which form its leading features throughout the varied scenery of the extensive regions which it fertilizes and adorns. It has been crossed, at different seasons and places, by *Hovell*, *Hume*, *Sturt*, *Mitchell*, *Hawdon*, and *Strzelecki*, and to the latter explorer we owe the knowledge of its sources. It is worthy of notice, that the *Hume* receives no tributaries from the westward or the northward. The first junction of any importance, is formed by the *Mitta Mitta River*, itself the recipient of *Tallargetta* and *Livingstone* creeks; some forty miles further, a small stream named the *Kewa* joins the main channel. About the same distance beyond, is a low granite hill named *Mount Ochtertyre*. Near this point Sir Thomas Mitchell describes the river as being bordered by so many lagoons, that he succeeded in obtaining a view of it only with great difficulty, and after nearly an hour’s ride. He found it, at length, running at the rate of two miles and-a-half an hour, and just beginning to overflow, while the opposite bank consisted of a reedy and impassable swamp.

Still, tracing the course of the *Hume* from its sources, we find it receiving the *Ovens*, another of the streams discovered during the memorable journey of Messrs. *Hovell* and *Hume*. The *Ovens* takes its rise in the mountainous district to the west of *Lake Omeo*; after its junction with the *River King*, it becomes an important stream, finely breaking up the dead levels of the surrounding plains. The next junction with the *Hume* is formed by a river of considerable magnitude, which has been unfortunate not seem a sufficient reason for setting aside the designation given to it by its earliest discoverer. To those who agree with Dr. *Lang* that the *Murray* is formed by the junction of the *Hume* and the *Murrumbidgee*, the distinction is a just and even a necessary one.

in receiving a variety of names. In the maps it appears generally marked as the *Goulburn*, but there being another stream of that name in New South Wales, it is styled by some the *Hovell*, while others prefer its native, and certainly more euphonic appellation of *Bayunga*. The river, however, by whatever name it may be designated, is a very fine stream. Rising among the mountains to the north-east of Western Port, after receiving *Broken River* and several smaller creeks, it joins the Hume in 143° E. long., 35° 19' S. lat. About 100 miles below this point, the high road between Sydney and Melbourne intersects the river, which during that distance has a medium breadth of from sixty to seventy yards, flowing through a fertile and populous district. The Bayunga is subject to high floods, which supply extensive lagoons much frequented by aquatic birds. Sir Thomas Mitchell, in recounting his expedition of 1836, describes it as having a breadth of sixty yards, with a firm bed and banks; its mean depth (near the Deegay ponds) being somewhat more than two fathoms, and its velocity about one mile and 240 yards an hour. The length of its course is, according to Lang, about 200 miles, but it is elsewhere stated at above 400 miles. The land, up to its sources, is occupied by squatters, but near its mouth it is less settled, the soil being considered of inferior quality.

The *Campaspé* falls into the Hume about four miles above the junction of the Goulburn or Bayunga. It rises near Mount Macedon, and is joined at an early period of its course by the *Barnard* or *Coliban*,* a stream remarkable for the bold character of its scenery, and the abrupt and steep ravines through which it flows, the left bank consisting of undulating hills and lofty rocks of granite, the right strangely contrasting with it, by the perfectly level summits of the adjacent hills, which give to the whole the appearance of having been, at one time, in a fluid state. Some of these table hills are separated by dry grassy vales of excellent soil. Further back, the rugged crests of a wooded range of a different formation, render the level character of this ancient lava or vesicular trap more obvious. The rocky channel of the Barnard forms in one part a very striking cataract, the waters having a perceptible descent of above sixty feet, but

they fall in reality more than double that height; in the lower part, however, the stream escapes unseen among large blocks of granite. The picturesque effect of the waterfall of Cobaw is attributable less to the body of water falling, or the loud noise, than to the bold character and harmonious grouping of the rocks over and amongst which it falls. The prevailing shades are light red and purple-grey, the rocks being finely interlaced with a small-leaved creeper of the brightest green; a dark-coloured moss relieves the vivid hues; while a brilliant iris, shining steadily amid the spray, blends into perfect harmony the lighter colour of the rocks, and the whiteness of the torrent rushing over them.†

Loddon River, called the *Yarrayne* by Mitchell, from the noble line of Yarra trees growing on the very brink of the stream, next joins the Hume, and waters in its course a large extent of fine country, between that river and the western side of the Mount Bunninyong range, where it has its origin. This stream has all the characteristics of a mountain torrent, being at some times (as when discovered, in 1836) of considerable importance, with an equal depth of about nine feet, and a current of nearly a mile and-a-half an hour, while at others it is little better than a rivulet. The next important junction with the Hume is formed by the Murrumbidgee, and has already been described in the account of the latter river (p. 444); and of the former, little more need here be said. Throughout that portion of its course which we have just traced, the Hume, or Murray, maintains the character of a deep and rapid stream, exceeding at some points 400 yards in breadth, and offering a valuable means of internal communication. According to Mitchell, it carries to the sea a body of fresh water sufficient to irrigate the whole country; which is in general so level, even to a great distance from the river banks, that the abundant waters might probably be turned into canals, for the purpose of supplying natural deficiencies of water at particular places, or of affording the means of transport across the wide plains. The numerous and extensive grassy flats which border the river are attended, however, with one great disadvantage—the banks being frequently so steep and yielding as to render the water inaccessible to cattle, who appear to shrink instinctively from the muddy margin.

† See Mitchell's *Expeditions into Australia*.

* According to Mr. Ham's map of Australia Felix (1849), the Barnard or Coliban joins a channel by which the Loddon and Campaspé anastomose

The *Yarra Yarra*, though in itself secondary in importance to several other rivers of Victoria, all of which are, however, very inferior to the noble stream whose course through this province we have just examined, nevertheless claims attention, since on its banks stands the fair city of Melbourne. The *Yarra Yarra* rises in a gully between the Snowy mountains and one of the Goulburn mountains, about 100 miles east-north-east, as the crow flies, from Port Phillip, in $37^{\circ} 46' S.$ lat., $146^{\circ} 17' 30'' E.$ long. The originating spring is so small that it could run through a four-inch pipe; it is, however, soon fed by branch streams, some of considerable magnitude, from the adjacent gullies. There are several waterfalls at the head of the stream, one rising some hundred feet above the bed of the river. The country is of trap-rock formation; freestone and slate are to be found. In various places the scenery (as described by Mr. Hoddle, who explored it in 1844) is extremely picturesque. Towards the source of the *Yarra Yarra*, the surface was boggy, and the scrub so close that the explorers could only cut their way through it at the rate of half a mile a day. Farther down, the soil was good, but very heavily timbered, many of the white gum-trees measuring fifty feet in circumference, and 150 feet in height; the tree-ferns were more than twenty feet high; and the sassafras and myrtle grew luxuriantly. The "greenest of trees" occasionally varied the scene; box, stringy bark, sometimes iron bark, black and silver wattle, and honeysuckle, studded portions of the country. One very pretty shrub abounded; it had smooth leaves, and produced, in bunches, a seed resembling black pepper in appearance and taste. Two other trees were also noticed, the fruit of which might be mistaken for the coffee-berry and plum. No aborigines were met with in the course of the expedition, which occupied nearly four months. This river disembogues in Hobson's bay, the northern extremity of Port Phillip; it is navigable up to Melbourne for steam-boats and other vessels of light draught, by a tortuous course of seven miles. The bar at its mouth has nine feet water at high tide. At the distance of four miles from Melbourne in a direct line, although perhaps three times that distance by the windings of the river, the *Yarra Yarra* receives, as a tributary from the northward, the *Merri creek*; at four or five miles farther, it receives the *Darebin creek*; and

at six beyond the latter stream, the *River Plenty*. These are all mountain torrents, rising in Mount Macedon range. There is much good land on their banks, although in general pretty heavily wooded and thickly covered with rocks, which are all evidently of volcanic origin, and have been carried down by the torrents from the extinct volcanoes of that part of the territory. The soil is a rich black mould, well adapted for the growth of the vine and other descriptions of European fruit-trees. There are many small farms, in this part of the country, in a highly creditable state of cultivation; and the situation of some of the villas, both on the main river and on its tributary streams or creeks, is romantic and beautiful in the highest degree.*

A very interesting account of the lower course of this river is given in an official document written by his Honour C. J. La Trobe, the Superintendent of Port Phillip. The source of the river had not then been ascertained, although the Superintendent rightly surmised that it would be found "among the offsets of the Snowy Alps to the eastward." Up to the furthest point to which it had then been surveyed it presents pretty much the uniform character of a constantly flowing stream, from a chain-and-a-half to two chains in breadth, and eight or ten feet in depth, sunk in ordinary seasons beneath abrupt and wooded banks. As it approaches the vicinity of Melbourne and its estuary, it is traversed by dykes of trap or ironstone, the most elevated and striking of which occurs at the head of the basin at Melbourne. At this point, in ordinary times of the tide, the fresh water mingles with that of the bay, which, following the lower bends of the river, is nine miles distant. In dry seasons, before the dam was built, the high tide would frequently pass this natural barrier, and flow strongly up the channel, its influence being felt for hours to the distance of perhaps a mile above the town.

Below the point where the river *Plenty* enters the *Yarra Yarra*, the high banks of the latter are found to border occasional flats, or low undulating tracts of various extent, composed of very rich alluvial soil; in the other portions of its course from the above point, the river will be seen to be confined within its deep bed at the foot of steep sandstone hills, or somewhat elevated flats of honeycomb land, sprinkled with trap boulders. The valley

* Lang's *Phillip's Land*.

of the Yarra Yarra, properly so called, may be said to terminate at Melbourne. At this point the bluff land retires on either hand and gives place to a wide tract of country, composed partly of low marsh, but very slightly raised above the level of the high tides, and partly of low undulating sandy rises, through which the Yarra Yarra and Salt-Water river take their course to their junction with the ocean. From the whole of this level the sea has doubtless retired, leaving the original coast line exceedingly well defined in the steep scarped banks which bound the low land for many miles.

The Yarra Yarra is subject to occasional heavy floods, which have occurred at every season of the year, in the height of summer and the depth of winter, as well as in the spring. That of 1844 was a very serious one. The river had been swollen by the usual equinoctial rains above its ordinary height, for some days previous to the night of the 2nd October, but it then rose for a few hours with a rapidity so unexpected, and with such short warning, that even after the flood had gained the opening below the hills, and consequently found room for its extension, the water rose so high, and poured down towards the bay with great rapidity, and in such a volume, that it was with difficulty that the people inhabiting the river banks a mile below the basin could be withdrawn from danger. Up the river, above and below Heidelberg (a village about seven miles from Melbourne), where there are many rich alluvial flats, the stream appears to have overflowed its high banks and covered the low cultivated ground on every side to the depth of ten, fifteen, or even twenty feet. In parts where it was shut in by the hills on either side, it flowed on with great velocity with a mean height of thirty feet and upwards above the ordinary level; and reaching the more open country in the vicinity of and below the town rose in the bed of the river to seven or eight feet above the usual level, and in the course of a few hours covered the whole of the lower ground to the foot of the bluffs in every direction to a mean depth of two or three feet. A simultaneous rise in the tides, caused mainly by the strong southerly gales, converted the whole of the lower country, from Melbourne to the *Salt-Water River*, into a wide lake.

The *Marriburnong*, or *Salt-Water River*, has its sources in the mountains south of Mount Macedon; it is fed by *Deep creek*

and others, and joins the Yarra Yarra four miles above its embouche in Hobson's Bay.

Barwon river, on whose northern bank the town of Geelong is built, rises in the high barren ranges near Cape Otway; waters, in its circuitous course of upwards of 100 miles, a splendid tract of country, and empties itself into the ocean by Lake Conewarre, a few miles to the westward of the entrance of Port Phillip. The mouth of the Barwon is only navigable for boats entering in very fine weather. The Barwon, near the foot of some low hills called by the natives Barabool, falls some height over a rocky shelf, forming a pretty waterfall, and at a little distance may be found meandering silently between grassy flats. A few miles to the south-east of Barabool hills the river communicates with a large lagoon; "after which," says Captain Stokes, "I was informed there was only a depth of three feet, and a width of one-eighth of a mile. The Barwon is therefore not available for water carriage to the town of Geelong, even if its entrance were better protected."

Moorabool River rises in the Boninyong or Brisbane range, and joins the Barwon at Geelong. There is much good land on the Moorabool, both towards its source and towards its mouth. The declivities of the valley of this river, as also the singular sloping treeless sides of the Barabool hills, are described as appearing to have just emerged from the sea, which had, as it were, scooped out their hollows and smoothed their sides."*

Native creek also joins the Barwon from the northward, with which another more important junction is soon after made on the same bank by the *River Leigh*. This stream rises to the north of Mount Boninyong, and divides the county of Grant from the Portland Bay district.

Glenelg River issues from a gorge on the western slope of the northern Grampians, and pursues a due westerly course for about fifty miles, to within twenty-five miles of the western limit of the province. It then takes a southerly bend, entering the territory of South Australia a few miles from the ocean, but, quickly recrossing the boundary line, disembogues a mile or two to the eastward of it in the deepest part of Discovery bay, 38° 2' 58" S. lat., 141° 2' 9" E. long. Mr. Tyers states that the mouth of the Glenelg cannot be made available as a harbour; for independently of the heavy breakers on the bar, the accumulation of sand is sometimes

* *Discoveries in Australia*, by Captain Stokes, R.N.

so great between the eastern and western shores of the entrance as completely to separate the river from the sea; and moreover the basin, through which it flows immediately before its entrance into the ocean, has a depth of not more than two or three feet water. Beyond the basin the river appears to be of considerable depth, but the banks are chiefly limestone cliffs, for the most part about 100 or 200 feet high, and steep; the water is brackish for several miles, and the land indifferent, being a mere sand, covered with thick scrub, vines, and forest.* Higher up on the Glenelg, the country is of a very different description. Sir Thomas Mitchell, who came upon this river at an earlier portion of its course, speaks in the highest terms of the "beauty and substantial value" of the adjacent country. "It seems," he says, "that the land was everywhere alike good, alike beautiful; all parts were verdant, whether on the finely varied hills, or in the equally romantic vales, which seemed to open in endless succession on both banks of the river." In $37^{\circ} 30'$ S. lat. the Glenelg receives the *Wando*, a tributary from the eastward; farther south, in about $37^{\circ} 40'$ S. lat., it is joined by the *Wannon*. This latter stream rises on the eastern slope of the Grampians, then winding round the southern extremity of the mountain range, strikes off towards the fine country on the westward, and after receiving several tributaries from the southern and western Grampians, is joined by the *Grange Burn*, forty miles to the westward and at length, about twenty miles farther west, falls into the Glenelg some forty miles inland from the mouth of the latter river. Between the junction of the Wannon and the sea, two small streams, named the *Crawford* and the *Stokes*, flow into the Glenelg from the eastward.

Leaving the Glenelg, we may in noticing the chief streams of Victoria (not already mentioned), which have their embouche in the ocean, trace also the leading features of the coast-line proceeding in an easterly direction to Cape Howe.

Discovery Bay is a long open indentation of the coast, and affords no shelter to shipping beyond that of a mere roadstead. Cape Bridgewater, its eastern extremity, is a hummocky cliffy-faced point of land, separated from the main by a low neck.

* Report of an Expedition to ascertain the position of the 141st degree of east longitude, &c. By C. J. Tyers, surveyor. Colonial Government paper. Sydney: 1841.

Four miles to the north of this point are some caves from forty to fifty feet high, and of the same depth; the ceilings were encrusted with stalactites, and the entrances overlooked some pretty fresh-water lakes, three miles in extent, separated from the sea by a narrow chain of sand hills. *Cape Nelson*, the southernmost point of the promontory, which shelters Portland bay on the eastward, is in $38^{\circ} 24' 15''$ S. lat., and $141^{\circ} 34' 15''$ E. long.

Portland Bay extends twenty-six miles from east to west, and ten from north to south. The most northern portion of its shore is comparatively low, but the western portion consists of bold cliffs rising to the height of 180 feet. There is excellent holding ground (mud with a coating of sand) in from four to seven fathoms, towards the western shore, where the anchorage is completely sheltered from the south-westerly winds, but exposed however to those from the south-east, which prevail during the summer months. Two small rocky islets, called *Lawrence Isles*, lie off the point forming the south side of the bay, and a much larger one named *Lady Julia Percy's Isle* (known among the whalers as Julian Island) lies off its eastern shore.

The rivers which fall into Portland bay are—the *Surry*, which disembogues in $38^{\circ} 15' 43''$ S. lat., and about $141^{\circ} 56''$ E. long.; the *Fitzroy*, a more important stream, with much good land on its banks; and the *Shaw* and *Eumerella*, which unite immediately above their junction with the ocean. The channels of both these streams are merged, for a time, in extensive swamps.

Moyn River next falls into the sea at *Port Fairy*, a small and not very secure harbour ($38^{\circ} 22'$ S. lat., $142^{\circ} 16'$ E. long.), chiefly valued as a whaling station. The entrance is open, and affords but insufficient shelter for the anchorage; during the winter, however, which is the calving season of the whales, the prevailing winds come off the land. The town of Belfast is built on the shore of this bay, at the mouth of the Moyn.

Lady or Merri Bay, about twenty miles east of Port Fairy, is mentioned by Dr. Lang as a small but superior harbour, but other writers appear to consider it merely an open roadstead. It receives the *Merri* and *Hopkins rivers*; the former of these is a small and unimportant stream; the latter rises near Mount Cole, in a range sometimes called by the same name as the river, on the south-western face of the Australian Pyrenees, thence it pursues a southerly

course of at least ninety miles, and falls into the sea at the town of Warnambool. Both banks of the Hopkins* are occupied by squatters the whole way down, the country being of excellent quality. The land, towards the upper part of its course, is best adapted for pastoral, and that on the lower portion, for agricultural pursuits. The Hopkins receives several tributaries. About ten miles from the coast, *Taylor's River*, or the *Caranbalac*, falls into it over a precipice of forty feet.

The coast line between Lady or Merri bay and *Moonlight head* is little known, and its weather-beaten shores are deemed dangerous and impracticable. On the latter point the erection of a light-house is in contemplation, as also on *Cape Otway*, the southern extremity of the curved coast-line extending between the mouths of the Hopkins and the Barwon, which are 100 miles apart, or 150, following the coast-line. Mr. Smythe, who surveyed the shore for a distance of about seventy miles, namely, from fifteen miles west of Cape Otway, and fifty-five miles east of that cape, describes it as bold, —skirted by perpendicular cliffs of 500 to 1000 feet elevation above the sea, and having numerous bays, which afford excellent anchorage, and are well protected from all but due easterly winds.

King's Island, thirty-four miles from Cape Otway, forms the southern side of the western entrance to Bass Strait. The *Harbinger reef* runs about four or five miles off the northern extremity of the island; and the channel between that reef and Cape Otway is twenty-nine miles wide, with soundings of fine white sand. It is, therefore, a perfectly safe ship-channel; I beat through it in a large vessel during the night. There are soundings along the whole south coast of Australia, at a considerable distance from

the land, and the current sets to the southward.

Port Phillip was discovered by Lieutenant Murray, R.N., when commanding the *Lady Nelson*, New South Wales colonial brig, in January, 1802, and was shortly after visited and surveyed by Captain Flinders, in his Majesty's ship *Investigator*. The entrance is scarcely two miles in width, but within, the port expands into a capacious haven. The heads are forty miles from the innermost anchorage, off Melbourne, situated at the north side of the bay, which has a breadth varying from twenty to sixty miles, and includes an area of not less than 875 square miles of water, capable of holding in perfect safety the largest fleet of ships that ever went to sea. The entrance is narrowed by rocks lying off *Point Nepean* (in 38° 18' S. lat., 144° 30' 30" E. long.), and by shoals on the opposite headland. It is, however, deep enough to admit vessels of any size at low water, and may be safely entered at flood tide, which rises six feet. Masters unacquainted with the harbour, should not attempt to enter at night or at ebb tide. There are numerous sand-banks about the middle of the harbour, which break the force of the sea when the wind is from the south, and afford a smooth anchorage near Melbourne; the eastern passage to which, along the bay, is the deepest and safest. On the western side of Port Phillip, a branch or arm extends into the land in a west-south-west direction for about fifteen miles, and has an entrance of about six miles wide; it is called *Geelong harbour*. A small basin at its upper end communicates with the larger one by a narrow navigable channel. Geelong harbour runs nearly east and west, and there is secure anchorage at its furthest extremity.†

* The desire of offering a tribute of esteem to an old brother officer, appears in this instance to have completely triumphed over the love of appropriate names and sweet sounds, usually manifested by Sir Thomas Mitchell in the numerous instances in which the task has devolved upon him of finding designations for hill and valley, mountain and stream. Judging from his general rule, we may fairly infer that could he have ascertained the native name, he would have gladly retained it, and saved this fine stream from a patronymic which, but for the associations connected with it, would most assuredly sound in the ears of Sir Thomas himself common-place and distasteful in the extreme.

† Port Phillip is now visited by vessels from India, China, and other places, where instructions for the guidance of mariners may not be readily obtainable.

One vessel from Hong-Kong was recently lost at the rather difficult entrance of this immense harbour. Commanders of ships having on board this work on the *British Colonies* would expect to find sailing directions for entering new havens, I therefore subjoin an abstract of the *Directions for Entering Port Phillip*, as laid down by Captain W. Hobson, R.N., of H.M.S. *Rattlesnake*, who made a running survey of the port. Captain Hobson says that—

“In approaching Port Phillip from the westward, the entrance cannot be distinguished until Point Nepean bears N.N.E.; then you open Shortland Bluff, and obtain a view of the Estuary. But the position of the entrance is easily determined by its situation with respect to Mount Flinders to the westward, and Arthur's Seat to the eastward. Mount Flinders is a small flat topped hill at the extremity of

The principal features, on entering the bay of Port Phillip, are *Arthur's Seat*, *Station Peak* [*Youang*], and a bluff in the north-east, called *Dandonong*. *Youang* is one of a small cluster of lofty peaks, rising abruptly out of a low plain on the west side of the bay. *Arthur's Seat* forms the north extremity of a towering range, declining gradually, on the east shore, to the coast at Cape Shanck.

Of the rivers which fall into Port Phillip, the *Yarra Yarra* and the *Salt Water river*, the *Barwon* and the *Moorabool*, have been the low land; it makes like an island, and bears W. $\frac{1}{2}$ N. from Point Nepean. *Arthur's Seat* is the highest land on the coast westward of Western Port; from the southward its north-west extremity appears precipitous; it slopes to the south-east, and its summit bears E. $\frac{1}{2}$ S. from Point Nepean, which is situated on the eastern side of the entrance, at the extremity of a peninsula, which slopes gradually from the base of *Arthur's Seat*; at one-sixth of a mile N.W. by W. from the Point is a low rocky islet, connected with the shore by a reef, which dries at low water; even in calm weather the sea breaks on it with considerable violence. Point Lonsdale, on the western side, is a low point jutting out from a dark rocky cliff, from which a reef runs two cables' length to the eastward, and forms the southern extremity of a bay that terminates at Shortland Bluff to the northward. To enter Port Phillip a fair wind or a flood tide is indispensable; with a fair wind keep in mid channel between Point Nepean and Point Lonsdale, and steer in for Shortland Bluff until Point Nepean bears S.E. by S., then shape a course as hereafter directed for the channel through which you mean to pass; with a beating wind do not approach Point Lonsdale nearer than a quarter of a mile, and be careful to avoid a sunken rock which lies N.W. by W., two cables' length from the rocky islet off Point Nepean. The soundings across the entrance are very irregular, varying in one cast from seven to twenty-four fathoms, and again suddenly shoaling to five or six. On the edge of the reef of Point Lonsdale is a depth of five fathoms close to the rocks, and the same depth on the southern edge of the reef that extends from Point Nepean to the rocky islet. The tide in the entrance runs with considerable force in the height of the springs. From its impetuosity, and the irregularity of the bottom, a rippling is created which in rough weather would render it very unsafe for an undecked vessel to pass through, and presents to a stranger so much the appearance of breakers, that it requires good nerve to venture on. If the wind should be light, care must be taken to get into the fair way before you come too near the reefs, as the flood tide sets across them towards the entrance of the port, with great strength. As the entrance is only contracted by projecting points, with a favourable tide or a fair wind, you are soon within them, and then if you are desirous to anchor, a good berth may be found any where between *Observatory Point* and *Point King*, within half a mile of the shore, in seven fathoms, clay bottom.

"When bound through the *Western Channel*, take care to avoid a little shoal called the *Pope's Eye*, on which there is only twelve feet. The following marks will place you exactly on it. *Swan Point* N. 1° E.

described, and the *Werribee* and *Little river* alone remain to be noticed.

Werribee River is a small fresh-water stream, having its origin in the high range between *Mounts Boninyong* and *Macedon*, and its embouche midway between *Melbourne* and *Geelong*. In seasons of drought (such as the summers of 1845 and 1846), it is little more than a succession of deep pools, with scarcely a perceptible current; but in winter it becomes a large and rapid river, and has been known to rise twelve feet in a single hour. At an early portion of (mag.) *Mount Eliza*, summit on with north end of the flat island. If bound through the *Western Channel*, pass to the westward of *Pope's Eye*, by keeping *Swan Point* to the northward of N. $\frac{3}{4}$ E., until *Shortland Bluff* bears W. $\frac{1}{2}$ S., and steer for the entrance of the channel which lies between a shoal that commences two cables' length to the northward of *Swan Point* and the west bank, to clear the bank off *Swan Point*, keep *Point Lonsdale* just open with *Shortland Bluff*, until *Swan Point* bears N. $\frac{1}{2}$ W., the course then is N.N.E., and midchannel will be preserved by keeping *Point Nepean* a finger's breadth open with *Swan Point*; the soundings are from four fathoms at the centre, to a quarter less three at the sides, from which the banks shoal suddenly to five or six feet, and in some places dry at low water, when *Station Peak* is seen over the north red cliff, bearing N. 72° W., you are clear to the northward of the banks, and will be in seven fathoms water. In approaching from the northward, bring *Point Nepean* open with *Swan Point* before the north red bank bears N. 72° W., and follow the leading marks. This channel has now a buoy marking the entrance on the edge of *Pope's Eye*, two more on the edge of the shoals on either hand, and a fourth on the *Swan Spit*. In beating through, you must be guided by the eye on the eastern side when the shoals show themselves very distinctly, and take care not to shut the marks. In standing to the westward, at all times, it is advisable to keep a person aloft, whence the shoals may generally be distinguished. The tide runs from two to three knots per hour, and follows the direction of the channel. To pass through the south channel when fairly within the port, keep along the south shore, at a mile distance, in nine or ten fathoms water, until abreast of *Point King*, from which situation an E. by S. course, with very slight deviations, will carry you through. It is impossible to find any leading mark for a channel so long, and in some places so narrow, that is not more liable to perplex a stranger than to guide him. The only certain measures of navigating it, until regularly buoyed, is by the eye from aloft, and when the weather is too hazy to show the banks it is not safe to go through. The soundings in the south channel are very irregular, from sixteen fathoms to five, and close to the edge of the banks, from that to three, two, and one fathom. Although the deepest water is to be found in this channel, it is not to be preferred by vessels drawing less than sixteen feet water; the absence of any leading mark, and its great length, being a great objection. The harbour-master in a late government notice, has declared this passage to be impracticable, from the shifting of the sands. The south sand that commences near *Point King*, forms the south side of the channel, its eastern end

its course, about two miles from Ballân, the Werribee forms a wide deep basin, bounded on all sides by basaltic columns; and above this basin the stream flows over a basaltic pavement of somewhat the same character as the famous Giants' Causeway, in Ireland; but the blocks are less regularly formed.*

Little River rises to the north or north-west of a low range called the Anaki hills, and falls into Port Phillip a few miles to the southward of the Werribee. Near its sources there is some good land, but towards its mouth are extensive plains of ferruginous sandstone.

Port Phillip is divided from Western Port by a low promontory, of which the south-western extremity is *Cape Shanck*, a narrow projection of calcareous formation, immediately off which lies a rock named, from its striking resemblance, *Pulpit rock*.

Western Port, discovered by Mr. Bass, in 1798, and so named by him from its being the limit of his explorations to the westward, from Sydney, is a fine harbour, situated in a wide and deep inlet ($38^{\circ} 15' S.$ lat.,

bears S.W. $\frac{1}{2}$ S., (mag.), from the white cliff, and to the eastward of that, deep water extends close to the shore.

"The northern side of the channel is formed by the middle ground, the western end of which bears N. $\frac{1}{3}$ E. (mag.) from Point King, and extends seven miles eastward when Station Peak is on with Indented Head bearing N.W. by W. (mag.), and White Cliff S.W. by W. $\frac{1}{2}$ W., you are clear of the middle ground, and may steer to the northward. Symond's Channel may be made available in N. or N.W. winds, when unable to fetch through the western channel, but is not recommended for any but small vessels until it is buoyed. The Pinnacle Channel is only suitable for small vessels, the deepest water will be found close along the edge of the great sand. To pass clear of the shoals to the northward, keep Station Peak on with the extreme of Indented Head, and do not shoal the water under nine fathoms. From the edge of the bank over the area of Port Phillip, to within a mile of the shore, there is deep water every where, with the exception of the Prince George Bank off Indented Head, and in running and beating towards Hobson's Bay, at the northern extremity of the port, there is nothing to apprehend. Steer in for Point Gellibrand and pass it at two cables' length distance, taking care in so doing not to shoal the water under five fathoms, and to anchor when you bring Point Gellibrand to bear S.S.W. in four-and-a-half fathom water; small vessels may bring it to bear south in two fathoms. A light-house is now erected on this point, which will at night direct strangers to the anchorage, independent of the lights of the town and numerous shipping. If you are bound into Geelong harbour from sea, be careful to give a berth of at least two miles from Indented Head to avoid the Prince George Bank, which extends from it in a N.E. direction. In rounding the shoal on the east and north sides do not shoal the water under seven fathoms until Point Richard bears W. by S., you may then haul up for Point Henry.

$145^{\circ} 30' E.$ long.), containing two great bays, the inner one being a circular basin of about eighteen miles across, with an island, called *French Island*, of about twelve miles in length and six in breadth, in its centre, which thus divides it into an eastern and a western arm. Another island, called *Phillip* or *Grant Island*, of about fifteen miles in length, stretches across the outer bay, almost from point to point, and effectually shelters the harbour, leaving a wide and well-protected ship channel on its western side, whilst on the eastern the passage is narrow, and fit only for boats and small vessels.

This harbour† presents one very curious feature, namely, a sort of canal or gut in the mud flats that front the eastern side of Grant Island. Its depth varies from six to seven fathoms; the width is half-a-mile. The chief, if not the only danger to be guarded against in Port Western, appears to be a sandbank, lying in the centre of the channel, four miles within the entrance.

Phillip Island consists of an unvaried strata of vitrified sandstone and clay. The

"Do not approach the northern shore nearer than one mile, and in passing Point Wilson keep Point Henry to the westward of W. by S. (mag.); one mile east, or E. by S. from Point Henry, there is tolerable good anchorage. On the bar at the head of Geelong harbour you cannot ensure more than seven feet at high water; at a cable's length within the bar there are five fathoms, and the depth may be carried close up to the shore; the rise and fall of the tide does not exceed four feet in any part of the port, and more commonly it does not rise beyond two feet six inches on the springs: both the time of high water and the extent to which it rises are greatly influenced by the wind; the force of the tide through the channels leading to the north from the mouth may be estimated at from two to three miles per hour; in the south channel it runs with less force, and in the wide expanse northward of the banks it is scarcely perceptible. When it acquires its greatest strength it is not safe for any open boat to venture out, but it is easy to conceive the rapidity with which it must run to raise the level of 875 square miles of water four feet by means of so small an embouchure."

* *Phillip's Land*; by Dr. Lang.

† In proceeding from Port Western to Port Phillip very extraordinary soundings were ascertained by Captain Stokes, in H.M.S. *Beagle*. About one-third of the way across from Grant Island to Cape Schanck, seven miles from the latter, the depth was ascertained to be *seventy fathoms*, on a gravelly bottom. The same unusual depth was likewise found by a single cast of the lead, three miles south of Cape Wollami, with the same kind of gravelly bottom, or a very fine kind of shingle. In the latter instance, there were on either side thirty-nine and thirty-three fathoms fine sand and shells. This depth is the greatest within the strait.—(See *Voyage of H.M.S. Beagle*, by Captain Stokes.)

western half of its southern side is formed by a line of cliffs, from one to three hundred feet in height. A remarkable pyramidal rock marks the point where they terminate, after which a long range of low hills, covered with scrub, stretches to *Cape Wollami*, a helmet-shaped headland, rising abruptly from the sea to the height of 480 feet. This cape, situated at the south-eastern extremity of Phillip island, is a very conspicuous object, the rest of the island, with little exception, being covered with low hills, thickly clothed with the tea-tree, scrub, and vinous plants. On the northern side of the island are several small lagoons or waterholes, situated a little distance inland, which contain pure water. The anchorage from the signal-post to Elizabeth cove affords complete shelter from south and south-west gales. The soil of *French island* is of a superior description to that of Phillip island; and on its shore is found freestone resembling the celebrated Portland stone, which rises in large perpendicular masses. The water near those cliffs is of sufficient depth for vessels of any size to anchor alongside. The upper land has for its principal trees, stringy bark, gum, and "she oak." The lowlands are impassably covered with mangrove and tea-tree.

The mainland shores of both the inner and outer bays are very rugged, and are broken in many places by the channels of small streams; of which, however, only one, *Bass River*, has received a name; and in the useful and carefully compiled map of Australia Felix, published in 1849, by Mr. Ham, there is not even this exception.

Leaving Western Port, we follow the coast line in a south-easterly direction, to Cape Patterson, a low point covered with scattered sand hillocks, which marks the commencement of a deep bight, in the centre of which a tongue of land, somewhat similar in shape and direction to that constituting the southern boundary of Port Phillip, forms a bay, or rather lagoon, called *Anderson's Inlet*, of about fifteen miles in diameter, into which the *Tarwon River* flows from the north. The

* A rock called Crocodile rock, in 39° 21' 30" S. lat., and 4° 41' 45" west of Sydney, lies in a line midway between the western extremities of Rodondo and Curtis islands, nearly nine miles from each. It is a smooth round-topped granite boulder, just protruding above the surface, and in fine weather the sea runs over it without breaking. The depth being forty-three fathoms close to it, if the waters of the strait were drawn off, the shape of it would be that of a column nearly 260 feet high.—*Stokes' Discoveries in Australia.*

DIV. II.

wild forest country, through which this stream takes its course, is hemmed in on the north, east, and west by the Strzelecki range and its branches,—the native name is *Tangel*, and there are said to be large open plains to the north-east, abounding with game.

Cape Liptrap, in 38° 55' S. lat., 145° 57' E. long., marks the southern extremity of the curve in which Anderson's inlet is situated, and the commencement of another equally striking. Cape Liptrap is twenty-four miles distant from *Wilson Promontory*, and the shore receding between these two points, forms a bay nine miles deep.

We now arrive at the majestic headland which forms the southern extremity of Australia. Wilson Promontory consists of a lofty mass of hard granite, twenty miles long by six to fourteen wide, its lofty summits rising to a height of 3,000 feet, are at most seasons of the year enveloped in a cloud of grey mist. Sometimes, however, the bold outline of the mountains is relieved against a clear sky, and their highest peaks catch the first rays of the morning sun as it rises from the southern ocean. The promontory is connected with the main land by a low sandy isthmus, which is described as bearing the appearance of having only recently been left dry. Several clusters of small islands, namely, the *Glennie*, *Cleft*, *Rodondo*,* and others, lie immediately off the west and south shore of the promontory; those known as the *Hogan* group, are situated to the south-east, the largest of them (in 39° 13' 14" S. lat.) is about a mile-and-a-half in extent. Captain Stokes, who landed upon it in 1842, when surveying Bass Strait, found a number of dogs left by sealers, that had become quite wild, and some fur seals in a cave on the south-east point. On the north-east is a boat cove sheltered by two small islets, and provided with fresh water.

Cape Wellington, the eastern projection of Wilson Promontory, forms the north point of a wide and spacious bay, called by Captain Stokes, *Waterloo Bay*,† from H.M.S. *Beagle* having anchored there on the anni-

† The following extract, quoted by Dr. Lang, from the *Port Phillip Patriot* (the date of which the doctor does not state), evidently refers to the inlet described above, on the authority of Captain Stokes, as Waterloo bay. "Lady's bay is a small securely-sheltered cove, with a depth, in many places, of from seven to eight fathoms water, on the eastern side of Wilson promontory, about four or five miles from its extremity. It was named by Captain Wishart, who discovered it, after his vessel, the *Lady of the Lake*. Lady's bay is so free from dangers that the

versary of that victory. There is no good anchorage between it and the south end of the promontory, from which it is four miles distant. The depth in the centre of Waterloo bay is twelve fathoms, muddy bottom. At its head lies the low valley three miles in length, which stretches across the promontory and forms a very conspicuous break in the high land. On the northern side of it, the lofty and wooded crest of Mount Wilson rises abruptly. On the southern is a ridge strewn over with immense boulders of granite. A rivulet winding amid the valley below, falls into the sea at the north end of a sand beach, forming the head of Waterloo bay.

Refuge Cove, to the north of Waterloo bay, is so named from being the only place a vessel can find shelter in from the eastward, on this side of the promontory. This small cove, which is only a cable wide at its entrance, may be recognised by *Kersop Peak*, which rises over the south part, and from its lying between Cape Wellington and *Horn Point*, and also from its being the first sandy beach that opens north of the former. The scenery of Refuge Cove is said to resemble that of Tierra del Fuego; and Captain Stokes states, that the smooth quiet sand beaches, the dense forests reaching to the water's edge, the mist-capped hills, and the gusts that swept down the valleys and roared through the rigging, forcibly recalled to his recollection that land of storms.

On the north side of Refuge Cove is the *Sealers' Cove* of the old charts, a small deep bay, open to the east. The trees on the south-west side are large, measuring eight feet in diameter, affording shade and moisture to tree-ferns, and an undergrowth of various kinds, and supporting on their branches a profusion of creepers which, interlacing, form a canopy resembling lattice-work.

Corner Inlet, an extensive basin, situated in the deep angle between Wilson promontory and the main land, has a bar extending off it six miles from the entrance, on which there is water for vessels drawing from sixteen to eighteen feet. Captain Stokes speaks of it as a "great useless sheet of water, only mariner, in entering, might touch the rocks with his vessel's broadside, and still float in six fathoms water. The shores are rocky, exceedingly steep, and covered with dense impenetrable scrub; the rocks are principally of granite. Good water is to be obtained in this locality. The bay, too, has the usual character of unfrequented harbours on this coast, abounding with fish."

navigable a mile or two within the entrance, and that chiefly on the northern side, the rest being occupied by mud flats." A very different opinion was however expressed concerning this inlet by its discoverer, Captain Lewis, the harbour-master of Port Phillip, who states that he "never entered a finer harbour," and adds that on entering it, keeping the promontory close on board, there were not less than three fathoms between the reefs: no bottom was found at twenty fathoms, nor for a considerable distance up the harbour. A group of islets named from their utility *Direction Isles*, lie a few miles outside the bar. Close to the promontory, and about seven miles from the entrance of Corner inlet, is a small islet called *Rabbit Island*, from the numbers of these animals found there, the progeny of a pair turned loose by a sealer about ten years ago. Over the north shore of Corner inlet is a woody range, the summit of which, Mount Fatigue, is 2,110 feet high. A small stream called *Franklin River* falls into Corner inlet from the north, and thence to Port Albert the coast is intersected by numerous creeks.

Port Albert is situated about fifteen miles to the eastward of Corner inlet, in 38° 44' S. lat., and 146° 41' E. long. It is a valuable harbour, available for vessels of 200 tons. The entrance is said to be rather intricate and circuitous, but not dangerous to those at all acquainted with the channel. "It has this special advantage," says Dr. Lang, "that when it would be unsafe—as I suspect it would in a violent south-easterly gale—to attempt the channel, there is shelter for vessels close at hand, between Rabbit island and the mainland of Wilson promontory."

Albert River and *Tarra River* fall into this port. Both these streams originate in thickly timbered ranges, about twenty miles inland. On the banks of the latter river the rising town of Alberton, the embryo capital of Gipps' Land, is built. Several islands, of various forms and sizes, lie off Port Albert.

Vessels bound to Alberton usually pass through *Shallow Inlet*; but the water being so shallow as to break across the entrance, if there is any swell, it is considered more prudent to enter by Corner inlet, and take the second opening on the right within the entrance.

Tracing the coast line from Alberton, first in a south-east and then in a north-east direction, we find it presenting few remarkable features. Occasionally it is broken by

streams descending from the south-eastern flanks of the Snowy mountains, of which *Merriman's Creek* is one of the largest; but there is little to deserve especial notice until we arrive at a series of lakes or lagoons, connected with each other, and running parallel to the ocean, with which they communicate by a narrow and unfortunately, not navigable channel. The largest and most westerly of these, *Lake Wellington*, contains fresh water, and is about twenty miles long, by about ten broad. It is joined to *Lake King* by a central and narrow lake, assuming towards Lake Wellington the character of a river. *Lake Reeve*, situated between the central lake and the sea, has a length of about eighty miles, opening into Lake King at its eastern extremity. The depth of water in mid-channel is twenty feet, and in some places this depth is maintained right across from land to land; but in others there are shallows and banks on either side. Into these lakes various rivers, all of which take their rise in the south-eastern face of the Snowy mountains, or rather on the eastern side of the dividing range, disembogue,—*Latrobe River* and the *Dunlop* or *Avon* falling into Lake Wellington, *Providence Ponds* into the central lake, and the *M'Arthur* or *Mitchell*, the *Riley*, and the *Tambo* into Lake King. According to Dr. Lang, the Latrobe is navigable for thirty miles from its embouche, the M'Arthur for twenty, and the Tambo for ten; but they have each a bar, carrying seven feet water, at their mouths. The Latrobe is much the largest of the three, and forms the general receptacle of the streams that rise on the eastern side of the dividing range for nearly a hundred miles, as well as of those that rise on the northern side of the coast range. Its principal tributaries, among which are the *M'Alister* and the *Barney*, originate in lofty mountains, of which the highest peaks are covered with perpetual snow; and therefore, they are not mere torrents, but perennial streams.*

After leaving Lake King, the coast-line becomes exceedingly monotonous, and continues so during the long tract extending towards Cape Howe, called the *Ninety-mile beach*, which has, I believe, not yet been surveyed.

To the eastward of Lake King is *Lake Tyers*, an interior lagoon, twenty miles from which the coast is broken by the impetuous torrent carried to the ocean by

* *Phillip's Land*, by Dr. Lang.

the *Margalong* or *Snowy River*. This stream rises in the Australian Alps, traverses the western portion of Monaroo plains, then pursuing a southerly course, dashes along its rocky channel from precipice to precipice, forming in its rapid descent many splendid waterfalls.

Jenoa River falls into the ocean at an inlet, a few miles west of Cape Howe.

Gabo Island, on which it is proposed to erect a lighthouse, is situated about a quarter of a mile from the sandy spit of Cape Howe. This isle is a mile and-a-half long, by three-quarters of a mile in breadth; it has a basis of solid rock, with some grassy land, and springs of fresh water. The highest part is 158 feet above the level of the sea. On the north-west of the island is a bay named *Santa Barbara*, where vessels not exceeding 100 tons may find shelter from south-east and south-west gales. Tenders have been issued by government for the construction of a light, as recommended by Mr. Tyers, which would be very advantageous to the coasting trade, and to all vessels navigating the south-east coast of Australia.

We have now traced all the rivers of any importance which fall into the ocean, as we had previously done those which through different channels unite their waters with the Murray or Hume; a few streams, however, still remain unnoticed which flow inland, and pour their waters into interior lagoons, or (like some of the streams in the older province) spread themselves over extensive marshes.

Of these the most remarkable is *Wimmera River*, which originates near Mount Cole, in the Pyrenees, thence pursuing a shallow and tortuous course for about 200 miles, through a region of sand and heath, succeeded by jungle and *mallee* (*eucalyptus dumosa*) scrub, intermingled occasionally with open plains and tolerable pasturage, it disembogues in Lake Hindmarsh. (See Lake Hindmarsh, p. 596.)

The leading characteristic of the *Wimmera* is its long and beautiful reaches, which extend towards the north and west, and are so numerous that Mitchell, after fording the main channel in 36° 46' 30" S. lat., 142° 39' 25" E. long., crossed no less than five, within the distance of a mile-and-a-half.

Avoca River, like the *Wimmera*, rises near Mount Cole, divides the Western Port from the *Wimmera* district, and disembogues in Lake Bael Bael. (See Lake Bael Bael, p. 596.)

A small stream named *Avon River* flows between the Wimmera and Avoca, and falls into Lake Banyong. *Woody Yaloah River* flows in a different direction to those just mentioned. It takes its rise near *Lake Barrambeet*, thence running a southerly course, it receives numerous tributaries, and falls into Lake Corangymite.

LAKES.—The numerous inland lakes of this province are among the most remarkable of its physical features. The waters of many of them are quite salt, much more so indeed than the waters of the ocean; and in summer, when the extensive evaporation that always takes place at that season leaves a large extent of the surface usually covered with water, and sometimes the whole bed of the lake quite dry, the salt is found in large crystals to the depth of three or four inches, and sometimes even of six, within the usual water-mark. It is of excellent quality, and is used for all domestic purposes by the squatters in this part of the territory, requiring only to be pounded when used for the table. (See *Geology of Victoria*.)

Lake Corangymite, (so called from the native word, corang or coraing, signifying bitter,) the largest, is situated in the Portland Bay district, between the counties of Hampden, Grenville, Heytesbury, and Polwarth. It lies about fifty miles due west of the town of Geelong. When first discovered, it was supposed, from its vast size, to be an arm of the sea, but was proved by Dr. Thomson to be a lake, apparently exceeding ninety miles in circumference. Its waters are perfectly salt, and towards the southward become very shallow. To the north the lake deepens to a degree which has not been ascertained. Lake Corangymite consists properly of two lakes, the smaller of which (called Gnarpurt) is situated at the north-western extremity of the larger—is of a circular shape, and does not appear to exceed eight or nine miles in circumference. The large lake is of a very irregular and serpentine form; and although the banks are generally rather bare of wood, it forms an attractive object in many fine views. This vast basin is supplied by numerous fresh-water streams, most of which, however, are in summer merely chains of ponds, their channels being, occasionally, quite dry. The *Woody Yaloah* enters the lake at its north-eastern extremity; the *Perring Yaloah* at its southern. These streams have been known to rise, in a single night, with such

rapidity, as to sweep away bullocks, drays and even men, encamped incautiously on their banks.* There are many small lakes in the vicinity of Lake Corangymite, most of them containing salt water. *Lake Colac*, however, is among the exceptions, being a beautiful sheet of fresh water, measuring from seven to eight miles in length, by from two to three in breadth. *Lake Poorumbeet* is another fresh-water lake, in form nearly circular, and measuring about four miles in circumference. The banks are precipitous, except at two or three points, where they sink to the level of the adjacent country. The lake is much frequented by water-fowl. The water, which is of excellent quality, and of unknown depth, is supplied by springs underground. It has an outlet to the southward, where the water that escapes forms first a marsh, and afterwards a small creek or stream. Lakes Colac and Poorumbeet lie near the southern extremity of lake Corangymite, the former to the eastward, the latter to the westward.

Lakes Barrambeet and *Boloke*, or *Bolac*, are small fresh-water lakes, situated in the Portland Bay district. Lake Bolac is some three miles in length, by about the same breadth. At one point the water is salt, but elsewhere quite fresh. It is chiefly supplied by *Fiery Creek*, a small stream from the Pyrenees.

Modewarre Lake (fourteen miles to the south-west of Geelong) is of a circular form, very shallow, and about six miles in circumference. The banks are formed into regular terraces all round, as if the water had once stood at a much higher level than it usually does now. In the continued drought of 1845 and 1846, the basin was quite dry, which it had not been previously during the recollection of the settlers. Its character and origin appear to be similar to the numerous circular lakes discovered by Mitchell, about 150 miles to the westward, named by him *Greenhill Lake*, *Mitre Lake*, &c.

Lake Hindmarsh, in the Wimmera district, is a fresh-water lake, estimated at about thirty miles in circumference. It is entirely supplied by the Wimmera river, which enters it from the south, and has an outlet on the north, whence it pursues its course through a barren and uninhabited region, to a second lake, from which it emerges as from Lake Hindmarsh, and is finally lost in a third.

Lake Bael Bael, situated between the Wimmera district and the Western Port district,

* *Lang's Phillip's Land.*

receives one branch of the Avoca river, the second pursues a northerly course, till again dividing, one channel terminates in a smaller lake; the other proceeds in a north-easterly direction, until it is also lost in an extensive lagoon.

Lake Banynong (in the Wimmera district) receives the Avon river.

Lake Boga—one of the numerous lakes bordering the upper course of the Loddon, near its junction with the Murray or Hume; is about twelve miles round, fresh, and probably of considerable depth. A low neck of firm ground separates it from a smaller lake, (about three miles in circumference) which is surrounded with reeds and bulrushes, and covered with black swans, ducks, and other water fowl.

Lake Omeo, situated in the Australian Alps, between the Mitta Mitta and Livingstone rivers, is an extensive basin, marked in Mr. Ham's recent map (1849) by the emphatic monosyllable, "dry." Count Strzelecki, in 1840, describes it as possessing only the shape of a lake, with scanty water, and rich pasturage. It bears a striking analogy to Lake Bathurst and Lake George, being, like them, destitute of springs and feeders, above the level of the adjacent rivers, and assimilating, in shape, rather to a drained reservoir, than to the natural basin of a lake.

DIVISIONS.—The larger and more southerly portion of Victoria has been lately marked out into counties. The three first established were, the counties of Bourke

* The boundaries stated by Mr. Wells, in his *Australian Gazetteer* (1848), of the three first established counties, and of the five squatting districts above mentioned, are:—

Bourke County (Melbourne) sixty-five miles long, sixty broad, area about 2,500,000 acres, bounded on the south-west and west by the Werribee, from its mouth to its source in the great dividing range; on the north by the great dividing range, from the source of the Werribee to that of the Plenty river; on the east by Plenty river, from its source to its confluence with the Yarra Yarra river, thence upward by that river to the confluence of the Deep creek, thence by Deep creek upward to the point where the main stream commences to run in a north-west direction; thence by a line southerly from the aforesaid bend to the Dandenong creek; thence downward to the shore of the Port Phillip bay, and on the south by the shores of Port Phillip bay to the mouth of the Werribee aforesaid.

Grant County (Geelong), fifty-eight miles long, north to south; forty-two miles broad, east to west; area 1,000,000 acres; bounded on the east by the western boundary of Bourke County; on the north by the dividing range, extending from Mount Blackwood to Mount Buninyong; on the west by Williamson's creek, to its confluence with the Yarrowee river,

(containing the city of Melbourne), Grant (the town of Geelong), and Normanby (the town of Portland); to these have been added those of Follet, Dundas, Villiers, Ripon, Hampden, Heytesbury, Talbot, Grenville, Polworth, Dalhousie, Rodney, Anglesey, Evelyn, Mornington, Douro, Haddington, Bruce, Abinger, Combermere, and Howe.

The designations of Port Phillip or Australia Felix are frequently applied to the whole province, although the region on which the latter term was originally bestowed extends only between the Glenelg and Campaspé rivers. The north-eastern portion of Victoria is usually termed *Murray district*; the north-western, *Wimmera district*; the south-eastern, *Gipps' Land*; the south-western, *Portland Bay district*; and the central, *Western Port district*; but the exact limits of these temporary divisions are very vaguely defined, and can be but of little interest to the general reader.* The capital of a newly colonized region is necessarily the first object of interest; we therefore proceed at once to examine the condition of Melbourne.

Melbourne, the adjacent country, and the Western Port District generally.—The better to understand the actual position of this embryo capital of an embryo province, and to appreciate the incontrovertible evidence which it affords of the enterprising spirit of our Anglo-Australian brethren, we must look back upon its condition twelve years ago.

thence to its confluence with the Barwon river; and by that river to its source, and by a line south to the sea coast and the waters of Port Phillip bay.

Normanby County (Portland), fifty miles long, north to south; eighty miles broad, east to west; area about 2,000,000 acres; bounded on the west by the Glenelg river, from its mouth to where the Wannon river joins it; on the north, by the Wannon river and Grange-Burn, thence by a line easterly to Lake Lintlithgow, following Cameron's creek to its source, and by a line south-east to the head of Muston's creek; on the east by Muston's creek to its junction with the Hopkin's river, following the course of that river until it reaches the sea; and on the south by the sea-shore to the mouth of the Glenelg, including the Lawrence, Lady Julia, Percy's Island, and the small islands at Port Fairy.

Western Port District is bounded on the south by the sea coast from Anderson's inlet to the south-east limit of the county of Bourke, further by the east and north boundaries of the said county to the Werribee river, and a north-west line to Mount Cole, thence by a line to the Avoca river, by the Avoca river to Lake Bael-Bael, and thence by a line, due north, to the Murray river; on the north and north-east by the Murray to the Goulburn, following the latter river to its source, and on the east by a line

In January, 1838, it consisted of a nucleus of huts embowered in the forest foliage, and had much the appearance of an Indian village. Two wooden houses served the purpose of inns, for the settlers who frequented the place. A small square wooden building, with an old ship's bell suspended from a tree, was used as a church or chapel by the various religious denominations; two or three so-called shops formed emporiums for the sale of every description of useful articles; the flesh of the kangaroo and varieties of wild fowl were abundantly used, for fresh mutton was still scarce, and beef seldom seen; and a *manuscript* newspaper, established by Fawkner, one of the enterprising men to whom England is indebted for the formation of this settlement, was the organ of public opinion in the new colony.

Fortunately, on the spot selected for the city, excellent brick earth was discovered at the river side, and the neighbourhood yielded much fine and rough stone, adapted for the builder. The progress of Melbourne during the ensuing six months was extraordinary. Mr. Arden, one of its early residents, states, in the useful manual to which we have previously referred, that "so rapid had been its

running due south to Anderson's inlet. The area within the above limits is estimated at 10,000,000 acres.

"Portland Bay District is bounded on the west by part of the South Australian frontier; on the north by the range dividing the waters falling into the Murray, from the waters falling into the Glenelg and other rivers to the east of Portland bay, extending from the head of the Glenelg to Mount Cole; on the east by part of the Western Port district, and the county of Grant; and on the south by the sea coast, exclusive of the county of Normanby. Area about 10,000,000 acres. [This large extent of country is now being divided into several counties—see accompanying map.]

"The *Wimmera District* is bounded on the east by a line from Mount Cole to the source of the Avoca river, thence by the Avoca river to Lake Baelbael, thence by a line due north to the Murray river; on the north by the Murray to the South Australian frontier; on the west by the South Australian frontier to the range dividing the waters that fall into the Murray from those falling into the Glenelg, and other rivers to the eastward of Portland bay; and on the south by that range to Mount Cole. The area is estimated at 15,000,000 acres.

"The *Murray District* is bounded on the south and west by the Goulburn river, to its junction with the Murray river; on the north and north-east by the Murray river, and its tributaries; and on the south-east by the dividing range, termed the Australian Alps. It contains about 8,000,000 acres."

Mr. Wells does not give any assignable boundaries to Gipp's Land.

* The following statement shews the progress of

progress, as to render it impossible for the memory to keep pace with the movement." Brick buildings, some even of two or three stories high, were numerous; the inns were transformed into handsome and convenient hotels; the lines of streets had been cleared, marked, and were, in some parts, under a process of partial macadamization; many shops, warehouses, agencies, had been established; population had quadrupled; branches of two Sydney banks were in active operation; and, in October, the *Port Phillip Gazette* was issued from the printing-office of Melbourne.

The rapid growth of the capital* received, in the years 1841-2, a severe but temporary check. Its progress since, though less speedy, lacking the strong excitement, not to say the infatuation, which characterized its earlier formation, has been steady; and the Melbourne of 1850 would do no discredit to a province of far older establishment and more developed resources. The chief defect in the plan of the city is the concentration of the buildings, the plan originally laid down having been on too small a scale. This is easily accounted for, as Melbourne was not originally intended for the capital of the province, the locality selected by Sir

Melbourne from wild desert in 1836-7, to October, 1840. The figures and calculations are from June, 1837, to October, 1840 :—

June, 1837—Population, 250; number of buildings, 36; value of buildings, £1,800; value of land, £3,517.

June, 1838—Population, 1,800; number of buildings, 300; value of buildings, £60,000; value of land, £17,406.

June, 1839—Population, 3,000; number of buildings, 560; value of buildings, £112,000; value of land, £169,542.

October, 1840—Population, 5,538; number of buildings, 923; value of buildings, £230,750; value of land, £372,600.

To the value of buildings	£230,750
Add value of land	372,600
Add the stock in trade of 36 mercantile houses, averaging £10,000	360,000
Of 175 miscellaneous dealers, aver. £250	43,750
3,000 tons colonial shipping, averaging £20 per ton	60,000
Deposits and capital of three banks, averaging £100,000	300,000
Paid up capital of five companies at £10,000	50,000

And the total value of property will be £1,392,000

[Note.—The value of property has been greatly increased by the recent gold discoveries: see Suppt.]

During the year 1840, the number of vessels which arrived at Melbourne was 313, nearly averaging one a-day (excepting the Sabbath), and the tonnage entering the port amounted to 54,928 tons.

Richard Bourke being Point Gellibrand, the peninsula forming the southern shore of Hobson's bay, (at the north-east end of the bay of Port Phillip,) on which Williamstown now stands. The want of fresh water at Williamstown appears to have been the chief obstacle to this design; while, on the other hand, the abundant supply afforded by the Yarra Yarra river to Melbourne and its vicinity, was naturally a striking advantage in the eyes of many intending settlers, who probably could not conveniently spare the time or means necessary to ensure a sufficiency of that indispensable article of subsistence. Williamstown is the anchorage station for ships, as only small craft pass up the Yarra Yarra to the capital.*

The public buildings of Melbourne, though necessarily not very numerous, are of a respectable, and even superior class. The court-house and gaol at Melbourne have been erected, at a cost to the colonists of £30,000. The gaol, a gloomy-looking pile, constructed of dark ferruginous sandstone, is favourably situated for health and exercise, and commands one of the finest marine views in the neighbourhood of the city. The building containing the government offices, placed on a commanding eminence in the western quarter of the town, near the court-house, is composed of dark blue whinstone and a light-greyish granite, which are judiciously blended. The custom-house, the next public building of importance, is stated to be a "chaste structure." The "Union" and the "Austral-Asian" banks have handsome houses. The episcopalian, presbyterian, Roman catholic, Wesleyan, independent, and congregational temples of worship, are all substantial edifices. There is a mechanics' institute, erected of stone, at a cost of £4,000, and various other public and private structures. There is a general market, a cattle market, and hay and corn markets, all under the superintendence of properly-qualified inspectors; and hotels of various grades. A bridge is now being constructed over the Yarra Yarra, composed of a single arch, 150 feet span, and thirty feet in width, which, it is estimated, will cost

£10,000. A botanical garden has been established in one of the beautiful bends of the river, and a good race-course has been laid out in the vicinity of the city. The streets are planned at right angles, the larger ones being a hundred feet in width, the smaller about thirty. The principal street is, strangely enough, named Collins, after the brave officer who, when directed, in 1803, to form a settlement at Port Phillip, declared it to be "all barren," and abandoned it as a hopeless undertaking. Elizabeth-street is situated in a hollow, between two considerable acclivities to the eastward and westward, called the Eastern and Western hills, the course of the river being nearly due west.

Melbourne is divided into four wards, and is under the municipal government of a corporation, consisting of a mayor, four aldermen, and twelve town councillors, whose exertions, though commenced at a period of general depression and commercial difficulty (November, 1842), speedily effected an improvement in the condition of the rising metropolis. The streets and by-ways of Melbourne (previous to the existence of the corporation) are described as having been frequently rendered impassable, from the operation of the weather, and the ceaseless traffic of ponderous bullock-drays. Thick gum tree stumps, and deep ruts, forming vast reservoirs of mud, were variegated by the intersecting gullies of temporary water-courses; and many an anxious wife and mother scanned the deep abyss of the urban excavations, in search of a drunken husband or a wayward child. A visitor, writing in 1842, declares himself to have been startled, soon after his arrival in the colony, by a paragraph in the newspaper, headed, "Another child drowned in the streets of Melbourne." In the following year, however, the stumps were removed by order of the town council, and the occasion of frequent accidents thus removed.† On the south bank of the Yarra Yarra, within a distance of three miles from Melbourne, there are many pretty cottages, surrounded by fertile and productive gardens, extending over a gently undulating

* Captain Stokes relates an anecdote when describing the bay of Port Phillip, which well illustrates the difficulty of detecting the mouths of Australian rivers. "In the north-west corner of Hobson's bay is the mouth of the Yarra Yarra river; but although only one mile and-a-half from the general anchorage, it is very difficult to be made out. Soon after we (*i. e.* H.M.S. *Beagle*) anchored in Hobson's bay, a small schooner passed, going to Melbourne. Several of the

officers were at the time standing on the poop, and each selected a spot at which the schooner was to enter the river; and although, as I have before stated, we were only a mile and a half from it, none of us was right. A single tall bushy-topped tree, about a mile inland, rose over the schooner as she left the waters of Hobson's bay."

† *Australia Felix*, by Westgarth; *Sydney and Melbourne*, by Baker.

declivity to the water's edge. The beauty of the scenery is enhanced by hills, and bold woodland in the background.

To the left of the city, and almost forming a part of it, is a small green hill (Batman's) of a conical shape, washed at its base by the Yarra Yarra river, from which the ascent is rather precipitous. On the opposite side there is a gentle slope towards an open plain, with clumps of trees spread here and there in wild and irregular beauty. Further on is a long swamp, nearly always covered with water, which gives it the appearance of a fine lake; beyond it the Willoughby plains commence, studded with trees like an English park. The level of these plains is interrupted by a succession of green mounds, then by undulating flats, less timbered. The view is bounded by a lofty range of mountains, which begin near Geelong and continue many miles into the interior of the country.

On the east of Melbourne, the view is bounded by the *Western Port range* of mountains, which stretches from the sea-coast inland until it reaches the *Plenty range*. The country between Melbourne and Western Port is a vast forest, broken at regular intervals by a succession of hills and valleys, which present many picturesque views.

The township of Collingwood, formerly Newtown, almost joins Melbourne; it has three hotels, one brewery, and numerous stores. Further inland, upon the banks of the Yarra Yarra, is the township of Clifton. For many miles the banks of this "wildly beautiful stream" are lined with villas and parks, and fringed with the graceful Yarra and mimosa trees.

In a westerly direction from Melbourne, in the direction of Mount Macedon, an open grassy plain extends for more than thirty miles, traversed by numerous creeks, and thickly covered with homesteads. The soil is light and dry, producing excellent pasture for sheep. Further west are the deep and romantic gullies of the Werribbee and adjacent creeks. The north portion of the Western Port district contains much valuable land, especially the extensive plains which extend between the Loddon and the Campaspé rivers, and also between the Campaspé and Goulburn or Bayunga, immediately below their junction with the Hume, to the south of which open forest country, clothed with good grass, but with occasional belts of scrub, extends along the eastern bank of the Loddon river.

Mr. James, speaking generally of the country behind the coast of Port Phillip and Portland Bay, describes it as among "the finest countries not only in Australia but perhaps in the world. Nobody can visit the banks of the Yarra Yarra, the heads of the river Plenty, the country about Mount Macedon, and the river Campaspé, without being charmed with its magnificence and brilliancy."

Mr. Richard Howitt—who was unfortunate in his attempt to settle in Victoria, partly (it would appear even from his interesting account of his proceedings) from his own inexperience, and want of perseverance, but chiefly from the disastrous period during which that attempt was made—in describing an excursion in search of his stray bullocks, which led him to within twelve miles of Mount Macedon, bears the following testimony to the goodness of the land:—"A more picturesque and beautiful region was never looked upon. I saw a great deal of very delightful country; it had a delicately-smooth lawnlike surface, without scrub or stones. Around me spread a spacious plain, the 'she oaks,' a rich silky brown, scattered thinly and in clumps; further off, bounding the plain, knolls, slopes, and glens, all of the smoothest outline, crowned or sprinkled with the same trees; and beyond, mountains and mountain ranges on which rested deliciously the blue of the summer heavens. Some of these mountains were wooded to the summits, others revealed through openings immeasurable plains, where sheep were whitely dotting the landscape, the golden shadows seen at intervals betwixt the long shadows of the 'she oaks.' A more splendid and extensive country there is not in the world for sheep and cattle than Australia Felix. How fat and sleek are its immense herds! I speak not here of the immediate neighbourhood of the town, but of the country generally."*

Williamstown (the sea-port town of Melbourne) whose early pretensions have been so effectually overshadowed by its powerful neighbour, is at present a mere coast village, with about 126 houses and 322 inhabitants. It nevertheless possesses great natural advantages. Situated at the head of the harbour of Port Phillip, with fine anchorage, a beach admirably adapted for the construction of piers and wharfs, and a considerable extent of level land washed on

* *Howitt's Impressions of Australia Felix*, pp. 108—115.

three sides by the sea, it is only reasonable to suppose that Williamstown will eventually become an important place, as its disadvantage (the want of water) is remediable. The only fault in its haven (Hobson's bay) appears to be that Point Gellibrand scarcely projects sufficiently to shelter large ships from south winds.

St. Kilda and *Brighton*, are two pleasant villages, situated on the eastern shore of the bay of Port Phillip, the former about two or three, the latter about six miles from Melbourne, in both of which are a considerable number of rural villas and *cottages ornée*, the residences, either constant or occasional, of respectable persons in business in the city. *St. Kilda* is the first point on the bay to the eastward, where the land is sufficiently elevated to be above the reach of all land-floods, and the terrace to seaward, in front of the line of houses along the bay, both there and at Brighton, at all seasons, in so fine a climate, forms a delightful promenade.

The route and distances by which the "royal mail" travels from Melbourne, the capital of Victoria, to Sydney, the capital of New South Wales, are—*Melbourne* to *Kinlochewe*, 18 miles; *Kilmore*, 32; *Goulburn river*, 25; *Honeysuckle creek*, 56; *Ovens river*, 53; *Albury*, 50; *Tarcotta creek*, 85; *Gundagai*, 35; *Yass*, 66; *Goulburn*, 60; *Berrima*, 40; *Campbeltown*, 47; *Sydney*, 33; total, 590 miles. Some of these estimates, however, must be under the mark, for the whole distance is about 600 miles. The "royal mail" leaves Sydney and Melbourne thrice in each week.

From Melbourne to Portland, 253 miles, there is also a "royal mail" conveyance once a week. Several steam boats ply daily between Melbourne and Geelong.

Geelong and its vicinity.—Geelong, the capital of the county of Grant (distant forty-five miles from Melbourne) stands partly on the picturesque cliffs of the fine harbour whose anchorage it overlooks, and partly on the river Barwon. Geelong harbour is situated at the head of the deep inlet formed by the western arm of Port Phillip. Its southern point is a level expanse of land, named Point Henry, from which a long spit extends, leaving only a shoal channel between it and the northern shore. Thus, though the harbour has apparently a broad open mouth, it is impossible for a large ship to enter it, so that the vessels which are annually charged with the large quantities of wool now exported from Geelong, are obliged to lie to

the eastward of Point Henry, about seven miles distant from the port. The bar, which has but nine feet water at high tide, is said to be composed of an ancient deposit of shells and other matter of inferior tenacity, and its removal is considered practicable. Geelong has several commodious places of worship; some good warehouses have been erected in the town, and the neighbourhood is adorned with cottages and gardens. The principal inn (Mack's hotel) is built on a very large and expensive scale. Like most other Australian towns, Geelong has its race ground. Several steam-boats ply on alternate days between Geelong and Melbourne, a passage of about six hours' duration. Geelong and Corio each support a weekly newspaper. [See Supplemental Division.]

The same policy, noticed in a previous instance, as having proved so *unconcentrative*, is exemplified yet more forcibly in the case of Geelong. The high price fixed upon the town allotments being found to hinder its formation, Sir George Gipps separated the township into two parts, calling the portion nearest the harbour North Geelong, and the other South Geelong, the minimum price of allotments in the former being £300 an acre, in the latter, £150. Suburban allotments, however, being procurable at the rate of £5 an acre, in one locality, and of £2 in another, opposition towns were formed immediately beyond the boundaries of the government towns. There is thus the rival town of *Ashby*, a mile from North Geelong; *Irishtown*, the rival of South Geelong, from which it is also a mile distant; and *Newtown*, a third opposition town, between the other two. The last census (1851) states the population of the government towns at 8,291, and that of the three opposition towns omitted. Corio, (pronounced Coraio, with the accent on the second syllable), is the native name for the beach at Geelong: the residents in the place usually call the town of North Geelong, Corio. About a mile and-a-quarter from Corio, the Barwon river passes Geelong, in its tortuous course, to the ocean; and as there is a natural terrace on each side of the river, parallel to its banks, several suburban allotments have been purchased in the vicinity, and delightful villas constructed on either bank. The country round Geelong and the neighbouring villages is admired alike for the beauty of its scenery and the richness of its soil, which will probably eventually render it a valuable agricultural district. A vineyard,

established near Geelong, among the Barra-bool hills, by three families of Vignerons, from the canton of Neufchatel in Switzerland, produced, in 1846, at the rate of 1,000 gallons of wine per acre. The peninsula included between the Barwon river and the western arm of Port Phillip, which is probably about twenty-five miles in length, from Indented Head to Geelong, contains about 160,000 acres, of which the greater part consists of land of the first quality, whether for pasture or cultivation. It seems to be a continuation of the same tract of level country that stretches along for upwards of 200 miles to the westward of Geelong, between the coast range, or Marrack hills, and the ranges of the interior.

To the westward of Geelong, grassy hills, occasionally varied with clumps of trees, extend towards lake Colac. An immense forest, between Geelong and Melbourne, was at first reported to be composed of cedar. On subsequent investigation, it appeared that the trees were not cedar, but a hard, solid, close-grained, dark-brown coloured wood, with straight trunks of twenty-five feet, and an average circumference of nine feet.

The country from Geelong to the Glenelg river may, in general terms, be described as a parallelogram, of 200 miles in length, by twenty-five miles in average breadth, the whole of which consists of land of the first quality for cultivation. It is nearly a dead level; and, for a railway, would present few engineering difficulties, and require no tunnelling or embankments. There is abundance of indigenous hard timber throughout; and a wooden railway might be laid down, at a cost of £1,000 per mile, whereby upwards of three million acres of the richest land would be rendered immediately available for the settlement of a numerous agricultural population.

Portland Bay District and Portland Town.—This district consists of a series of undulations, intersected by numerous rivers and creeks. *Portland*, the chief town of Normanby county, and indeed of the Portland Bay district, is built on slightly rising ground, on the western side of the fine bay, whose name it bears. It is well placed, presenting a fine bold terrace towards the sea, backed by a sufficient extent of level ground for a large town.

The first town allotments in Portland were sold on the 15th October, 1840, and the land mania having then reached its height, the

forty allotments then disposed of realised £11,026. Dr. Lang, writing in 1847, says, that nearly £30,000 have since been invested in buildings. The population of Portland in 1846 was 510. Its trade is already considerable, and it has two respectable weekly journals. Mr. Angas, speaking from personal observation, says that the country in this vicinity bears marks of having been raised by volcanic action from beneath the ocean; the same white coral limestone which occurs at Mount Gambier, also appears here. The aspect of the land resembles that in the neighbourhood of Cape Northumberland, and it would seem that a similar belt of country extends in this direction. A thickly wooded district is in the immediate vicinity of the bay, consisting of stunted eucalypti, black-wood, mimosa-wattle, the cherry (*exocarpus*), and a little underwood. The soil is rich, the country verdant, even in mid-winter, and the climate cooler than that of Adelaide. The establishments of Messrs. Henty (the first settlers at Portland Bay) are extensive, and the town has grown up around them. The soil around Portland Bay is described to be of the richest alluvial kind; the vegetable productions remarkable for their size and quality—the barley “yielding for four years a continued crop”—the timber peculiar for both beauty and utility, and the climate unrivalled. Several whaling vessels annually take up their stations in the bay, the property of parties residing in the neighbouring colonies. The anchorage is good; the water in the harbour sometimes smooth enough to admit of landing from boats; it is, however, often troublesome, and indeed dangerous, to debark on the open beach; and several shipwrecks and loss of life have occurred. A wooden railroad and jetty have been constructed from the stringy bark wood in the neighbouring forest, for the conveyance of goods to and from the vessels in the bay.

Belfast is a thriving sea-port town, also situated in the county of Normanby, on Port Fairy. It is 779 miles from Sydney. Population in 1846 was 269. In 1851 was 3,846.

One of the finest tracts in the district is situated between the Grampians and the boundary of South Australia. The rich black soil, several feet deep on a subsoil of clay, is lightly wooded, covered with the finest pasturage, and abundantly watered by the Grange Burn, Wannon, Glenelg, and their tributaries. The country near the coast, between the mouth of the Glenelg

and Point Fairy, is generally poor, but there is some better soil on the banks of the river Crawford, and the land on the Fitzroy river is adapted for either grazing or cultivation. In the immediate vicinity of Mount Eckerley (Normanby county), there is a tract called "the five-mile patch," reported to be of extraordinary fertility. Mount Rouse (Villiers county) is of trap formation, the soil around it, and between it and Mount Shadwell is good, but swamps are numerous. An open forest of stunted *Banksia* extends six miles to the northward of Mount Rouse. Fine downs for two or three miles in width, divide this from an open forest (chiefly of eucalypti) extending some distance east and west of Mount Sturgeon, the soil being pretty good.*

The country around Cape Otway is almost unknown, owing to its being densely timbered with forest trees of gigantic size, covered with rank and nearly tropical vegetation, consisting of an undergrowth of vines and other creepers, which flourish with extraordinary luxuriance, and form a trellis-work from tree to tree, through which a passage can with difficulty be effected by a tomahawk; the whole intersected with ravines and ranges which render exploration very difficult. This tract extends over about two million of acres, and is said by the few who have penetrated it to some extent to be plentifully watered by running streams. The timber is of the most valuable description, and includes a cedar not found in other parts of the province. The country, although now considered wild and impracticable will, it is supposed, from its peculiar resources, be eventually found available for small settlers of the non-stockholding yeomanry.

An open country, with vast plains, extends from Lake Colac and the river Leigh, to the north and west of Lake Corangymite and Mount Elephant. To the southward of Colac Lake there is a romantically beautiful district, with a thickly grassed soil, interspersed with the tracts termed "stony rises." Near Lake Corangymite the land is equally fine, especially to the westward. In the neighbourhood of Lake Killambeet there are plains of great extent, belted with tall trees, copses, and open forest. North-west of Lake Porumbcet, on the road from Melbourne to Portland, "the country," says Dr. Lang, "for the next seven or eight miles, continues pretty much the same as before, rich plains, slightly undulating, with

* Tyer's Report.

a thick carpeting of grass, but with a somewhat greater frequency and variety of natural wood." The Mount Leura district is remarkably well watered, rain is frequent, springs abundant, as well as creeks or small streams, and water holes, or natural pools. A whimsical proof of the contrast afforded by a large portion of the Portland Bay district and the adjacent regions, to the impenetrable nature of other parts of the province, was afforded in the early days of the colony by Messrs. Hawdon and Mundy, who left the neighbourhood of Mount Macedon, in a *tandem*, on the 11th of July, 1839, and drove through the uninhabited country to Adelaide, a distance of 540 miles in twenty-seven days. They described this extensive region as being for the greater part like an English park.

Wimmera Squatting District.—Sandy wastes, alternating with extensive tracts, covered with the impenetrable scrub (*eucalyptus dumosa*) called *Mallee* by the aborigines, render the northern and western portions of this district hopelessly barren; but on the east of the Wimmera river a good sheep country extends in a parallel direction with the river, composed of light forest and plains. The lakes of this district are numerous, the chief of them, namely, Hindmarsh, Boga, Bael-Bael, and others, have been already mentioned.

Murray District.—Count Strzelecki, on his journey to Gipps' Land, visited this district, and crossed *Maue's range*, a spur of the Australian Alps, which divides the tributary creeks that flow from either side to the Murray and the Murrumbidgee. To the eastward of the meridian of 148° the mountains present the effects of some extraordinary perturbations, and form many culminating and characteristic eminences; to the westward they are grouped in confusion, and the country is broken, rocky, and often impassable. But both the ranges and valleys furnish abundant natural and artificial crops, as is evident from the healthy state of the sheep and cattle, and from the returns of grain which the squatters obtain from the culture of the soil. Between the Maue and Ajuk ranges north of the parallel of 37°, every feature bears the stamp of grandeur; the broken country to the westward in which the Tangella creek takes its rise, to the eastward, the dividing range, here called the Australian Alps, with its stupendous peaks and domes, and in front the beautiful valley which the Murray so bountifully waters,

unite to form attractions of no ordinary magnitude. Count Strzelecki followed the windings of a valley in this district for about seventy miles, and found it intersected by gullies and torrents, and by numberless steep ridges.

The soil in all the valleys is composed of disintegrated argillaceous and calcareous rocks, richly mixed with sediments of decomposed vegetable matter. For pasture and agriculture, the valley of the Murray, with those adjacent, and the country round Lake Omeo, offer the most suitable spots. Strzelecki says, the Murray, with its tributaries, the Mitta-Mitta, and others, supply both the valleys and Omeo with plentiful streams; everywhere nature seems to have most liberally enriched this district for the benefit of man.

Mercer's Vale is a grassy plain of ten or twelve miles in extent, almost completely destitute of timber, and surrounded in great measure by hills of moderate elevation, and distant mountain ranges.

Gipps' Land District and Alberton.—This important section of the Victoria Province may be said to extend from Cape Howe to Cape Paterson, near Western Port, on a sea-coast line of about three hundred miles. The inland boundary is marked by the Strzelecki range and Australian Alps, stretching from Western Port to Mount Kosciusko; thence to Cape Howe along the boundary line which separates Victoria Province from New South Wales. The portion examined by Count Strzelecki, in 1840, from the Thompson river to the southward has a sea-coast of about 250 miles in extent, and comprises an area estimated at 5,600 square miles, of which about 3,600 consist of forests, plains, and valleys, which in richness of soil, pasturage, inland navigation, and situation, cannot, it is said, be surpassed. Two thousand square miles of the coast range are clothed with the blue gum and black butt trees of excellent quality, and contain many large and deep valleys, well adapted for cattle. The country is abundantly watered by numerous rivers, and by a navigable lake and lagoons which bisect the coast for 100 miles.

According to the Parliamentary Papers, No. 120 (9th March, 1841), containing the copy of a despatch by Sir G. Gipps, which shows the progressive discovery and occupation of New South Wales during the period of his administration, "Gipps' Land" begins at 17 miles S.S.E. from Lake Omeo, and

is bounded on the N.E. by the meridian of 148°. In this report, Strzelecki says, that few of the parts explored presented him with more gratifying prospects than this division: a beautiful stream, the first of the eastern waters, winding through a fine valley, soon assumed the features of a river (the Thompson), and appeared to be a guide into a country hitherto unoccupied by the white man. A hilly country closes the valley, narrows the river banks, and brings the explorer across the mountain ridges to an elevation from whence there is a view of the sea on the distant horizon; to the south-east an undulating country, with mountain ridges to the north-east. Approaching or receding from the river according to the windings of its bordering hills, the descent into a noble forest tract is effected.

The valley of the Thompson river is separated from that of the M'Arthur, which is wide and covered with luxuriant pasture, and slopes gradually in open forest ground to Lake King and the sea-coast. From the M'Arthur river, a south-west course leads through forest and pasture country, crossed by several rivers, and intersected by hills clothed with timber; the coast range of mountains approaches nearer to the ocean, and narrows the expanse of forest into a vast valley. The magnificent prairies termed *Barney's Plains*, from thirty to fifty miles in extent, and bordered by copious streams, are surrounded by the most attractive scenery. The dividing range is continued in a south-east direction to Wilson's promontory, and presents some fine panoramic views. Viewed from Mount Gisborne, Gipps' Land is described by its explorer, as resembling a semi-lunar amphitheatre, walled from north-east to south-west by lofty and picturesque mountain scenery, and open towards the south-east, where it faces with its sloping area the uninterrupted horizon of the sea.

Most of the ranges between Gipps' Land and Western Port are of easy ascent and descent, none are rocky or of a precipitate character; and there are several facilities for opening this region, which may be termed the Switzerland of Australia, to the enterprise of the settlers. These ranges are nevertheless so densely covered with scrub, interwoven with grasses, and encumbered with gigantic trees, fallen and scattered in confusion, that Strzelecki, when passing from Gipps' Land to Western Port, was forced, in the route adopted, at its very commencement, to abandon his pack-horses

and collections; and not until after twenty-six days of incessant labour did he and his half-famished party succeed in extricating themselves from a situation in which they were in imminent danger of perishing. Such were the difficulties encountered on that occasion, that, with the utmost exertion, stimulated by the sense of peril, a progress of from two to three miles a day, was all that could be accomplished.

The honour of discovering this district is disputed with Count Strzelecki by Mr. M'Millan, overseer for the Messrs. M'Alister, of New South Wales, who in January 1840, made an expedition into an unexplored country, which, from its resemblance to his native land, he named *Caledonia Australis*, and in the following month wrote to his employers a somewhat detailed description concerning it. The result of Count Strzelecki's expedition was made known in July, but without attempting to decide the question of priority of discovery, the merit of acquainting the public with the existence of these fine pastures certainly rests with the Count.

There are three distinct descriptions of land in the Gipps Land district. The first consists of poor sandy soil and dense scrub; the second, of open forest, forming good pasture land; and the third, of the best quality for cultivation. Of the first description, is the land along the sea coast, and also the higher mountains, which are, for the most part, covered with dense scrub, growing on masses of disintegrated granite or sand. The back country, generally, towards the base of the mountains that hem in the district, may be included in the second description: while the third comprises the alluvial soil, within two or three miles of the rivers, and a belt of five to twenty miles in breadth, generally along the lakes, from the Tambo river to Alberton. Dr. Lang thinks there are no less than 500 square miles = 320,000 acres, of these rich flats, unencumbered with timber, and ready for the plough; close to navigable water; so gently undulating, that hardly any change in the level is observable; with abundance of white, blue, and blackish limestone, from the vicinage of the snow-covered Australian Alps, and the southern coast of the Pacific, blessed with abundance of rain, and enjoying a cool but genial climate. The lakes are quite fresh in winter, and the rivers always so: but in February and March, the water of the lakes becomes rather brackish. It is,

however, fit for stock; and pure water may, at any time, be obtained by sinking wells. Gipps Land furnishes considerable quantities of fat cattle, which are sent for sale to Van Diemen's Island; and an enterprising settler, Mr. M'Leod, has the contract for the supply of fresh meat for the government at Hobart Town (Van Diemen's Land.)

Alberton, the port of Gipps Land, in $38^{\circ} 44' S.$, $146^{\circ} 41' E.$, is situated on the left bank of Albert river, and within two miles of the Tarra river, which is to the eastward. It occupies a very important position, and is rising into eminence. Alberton is distant from the Latrobe river twenty-five miles; at this point, the road into the interior crosses the Latrobe, and a tram or wooden rail from Alberton, will open the inland communication. Steam-vessels are probably, by this time, plying between the Albert and Melbourne, a distance of 220 miles by the coast line.

GEOLOGY.—The principal geological feature in this division of Australia is the volcanic region, which extends over an area of 300 miles from east to west, and 100 to 150 miles from north to south. There are no volcanoes at the present time, but there are numerous craters, which by some are supposed to have poured forth their lava and fire while Southern Australia was still submerged beneath the Pacific Ocean. Of the number and size of these volcanic cones we have as yet no precise intelligence. Mount Leura, which is situated between lakes Timboon and Porumbet, to the eastward of Lake Corangymite, is upwards of 600 feet in height, has about a fifth part of the rim of the ancient crater remaining; within the crater a conical hill has been formed, its summit nearly on a level with the exterior rim, and covered with trees and brushwood. The ascent towards the top of the mount is very steep. The sides are plentifully covered with scoriae and fragments of rocks that have undergone the action of fire; but Dr. Lang, who examined the crater, did not observe any of the light pumice-stone, or cellular lava, which are found in such large masses in the volcanic region of the Mount Macedon district. Blocks of igneous rocks are seen for miles around Mount Leura, protruding from a deep chocolate-coloured soil, consisting chiefly of decomposed volcanic matter. From the summit of Mount Leura twelve volcanic cones are visible, and as many lakes, several of which were formerly the craters of other extinct volcanoes. Of these Mount

Eccles, near Portland bay, is the most perfect; it has a small lake of fresh water at the bottom of the crater, much frequented by wild fowl; the lava which it formerly poured forth can be traced for ten miles. Mount Eccles is fifty miles due west from Mount Shadwell; Mount Rouse (elevation 526 feet) thirty miles distant to the northward of west; and Mount Napier, a well-defined crater, is forty-five miles, nearly to the northward of west. Mount Napier is surrounded by sharp angular fragments of trap. These three mountains are all within a few miles of the 142nd degree of east longitude. It is therefore a region of great interest to geological inquirers, and a proper survey would add materially to the facts which are being registered in different countries in illustration of the changes this earth has undergone. Canada, New Brunswick, Nova Scotia, Prince Edward Island, and other colonies (of older establishment, it must however be remembered,) have each provided out of their local revenues the funds necessary for geological surveys of their respective provinces; and it is to be hoped that this important duty will not be long delayed in Austral-Asia, not only for the sake of science, but as a means of exploring the mineral treasures, and of becoming better acquainted with the qualities of the soil, in order to its more successful cultivation. Tracts termed *stony rises* exist in several districts; they are usually ranged around, or in the vicinity of, a volcano, and consist of innumerable hillocks or ridges of rocky fragments, varying in height from ten to fifty feet, crowded together in a confused manner, as if ejected from the neighbouring volcanoes. Mr. Westgarth is of opinion that they have been caused by some subterranean force at no great depth from the surface, which has raised up and broken into fragments the rocky covering previously spread by igneous action over a great extent of this part of Australia. Some of these *rises* are not stony, but smooth and covered with grass, and beneath the soil is a stratum of earthy limestone. The rock of the *stony rises*, which is of basaltic character, usually vesicular in structure, with a large admixture of iron, is probably beneath the earthy limestone strata. The rocks enclosing the singular valleys, containing the stagnant salt lakes near Mount Nicholson, are composed of basalt, and in an adjacent running stream it lies in blocks, forming small cliffs.

The general character of the rocks in the province is vesicular trap, or cellular lava. The sides of many of the hills, particularly those of Mounts Elephant and Nanime, are covered with a vast quantity of heavy scoriæ, resembling the refuse of smelted iron. [See recent discoveries in Supp'.]

Throughout the country traversed by Mr. Tyers, except where the formation was limestone or granitic, the magnetic properties of the rocks were so great, as to render the needle almost useless as a surveying instrument. In some cases, the deviation of the pole from the magnetic north was upwards of ten degrees. In his route from Melbourne, Mr. Tyers proceeded by Geelong, westward, to Mount Shadwell; thence to Mount Rouse; then north to Lake Linlithgow; then westerly to Yo-ho ponds; thence south to Mount Eckersley and Portland bay; and from thence along the coast to the Glenelg river. His return route was nearly on the same line, until he reached Mount Sturgeon, whence he travelled to Melbourne by Lake Bolac, at a distance of twenty to thirty miles north of his outward-bound route.

The Pyrenees terminate to the southward in Mount Cole, a lofty mass of granite, as do also the Australian Alps, Wilson's Promontory being of hard granite, about twenty miles long, by six to fourteen miles broad. There are immense surface masses of this formation at the distance of five and ten miles from Melbourne; said to equal that obtained near Aberdeen. The stone in some places bids defiance to the best tempered tools; but the manner in which the Chinese split the hardest granite into columns twenty or thirty feet long might be tried. They drill holes at short distances along the splitting line, and then insert dry spongy withs, or a reedy substance, which, on the application of moisture and heat divides the largest blocks into the thickness required.

Granite is found protruding in some places in the valley of the Glenelg river. It varies considerably in the size of its component parts, which sometimes, especially in quartz and felspar, exceed one foot square; and in this Sir T. Mitchell found distinctly imbedded friable masses, apparently of sandstone, but which on further examination were ascertained to consist of a very fine-grained grey granite, approaching in its character to mica slate. The bluff hill called Mount Cole consists of huge blocks

of granite, composed of pink felspar, white quartz, and silvery mica.

The base of the Bunninyong or Brisbane range is supposed to be schistus. Mount Bunninyong, its southern termination, 1570 feet in perpendicular height, is of volcanic origin. Mount Macedon is sienitic.

In a small marsh near Mount Macedon, about five feet below the surface, and immediately beneath a dark alluvium, about a foot in thickness, covered by a bed of yellow clay, of eighteen inches, on which rested a stratum of rich black soil, there were found, in 1846, the fossil bones of several extinct animals. Mr. P. Mayne was the discoverer, and they are described by Mr. M'Combie, a gentleman who has exerted himself with success in making the condition of the Australian colonies understood, and who is now the editor of the *Port Phillip Gazette*:—

“ Amongst the bones found are the molar teeth, under-jaw part of a femur, humeris, and scapula, and other bones of a very large animal, resembling, in many of its anatomical characters, those of the mastodon. The molar teeth consist of the recurved transverse ridges, which were covered externally by a thick layer of enamel. The posterior ridge has, at its base, a small transverse prominence, covered by enamel, which ran parallel to the facet. The two ridges are united by an isthmus of crusta-petrosa, so characteristic of the mastodon. The largest of these teeth measured one inch eight lines transversely, and in an antero-postero direction, one inch six lines. The distance between the ridge of the crown and the extremity of the fang, in one of the largest specimens, was three inches six lines. The discovery of half an inferior jaw-bone, with the teeth *in situ*, gives the following dental formula:—incisors, 2; canines, 0; molars, 6; but this, however, requires other confirmatory observations. The enamel is arranged (with a very trifling difference) like that in the European and American species of mastodon, the mammilloid character of the tooth only being wanting; but the solitary incisor, and the isthmus of crusta-petrosa uniting the bases of the angular ridges of the molars, are highly characteristic of the mastodon. The largest bone, which appears to be the shaft of a thigh bone, has, unfortunately, both its articular extremities broken off; but from its broad and flattened character, it must have given support to a ponderous carcase. Its broadest part measured ten inches in circumference. The blade bone, or scapula, is also a large and strong bone, but so much mutilated as to have lost its features. Molar and incisor teeth, with other bones of a large species of kangaroo, exceeding by one-third, at least, the largest individual of the present *macropus major*, are abundant. This fossil is probably identical with that found in the Wellington caves by Sir Thomas Mitchell, and called by Professor Owen, *macropus titan*. Two incisor teeth of a huge rhodent were also found amongst these bones.”

Mount Sturgeon, the southern extremity of the Grampians, is said by some to be a conspicuous mass of granite, and by other writers

is described as consisting of a fine ferruginous sandstone, in which is imbedded a quantity of quartz; but between Mount Sturgeon and Mount Eckerley, twenty miles to the northward of Portland, and sixty miles in a direct line south-west of Mount Sturgeon, the rocks are chiefly trap, which indicates the volcanic character of the intermediate plain.

At the extremities of Mount Napier, in Normanby county, rough sharp-pointed fragments of cellular rocks are scattered about in heaps; the cells or pores are several inches in diameter, and, unlike amygdaloidal rocks, are all empty. The reefs at Portland Bay consist of a similar rock in rounded nodules, and a more compact trap rock, consisting principally of felspar, lying above them.

Near Cape Otway the sea-coast is of a sandstone formation; the cliffs attain, in some places, 100 feet in perpendicular height, and are studded with granite pebbles, like plums in a plum-pudding. About ten miles to the west of Cape Otway there is a remarkable cave, large enough to hold some hundred men, with a beautiful crystallized substance, formed by the dropping of water for years, and hanging from its centre, like a chandelier.

From Port Fairy to the Glenelg river, the country is of limestone formation, and, at these two places, nearly pure. The cliffs at Portland Bay are composed of an arinaeous limestone (containing oysters, and the *exuvia* of other shell-fish), ferruginous sandstone, and trap. Over the limestone is a red clay, and a red pigment or ochre, used by the natives for painting their bodies. Half-way between the Glenelg river and Portland bay, on the south-east side of a lake, are cliffs of conglomerate, composed of quartz, trap, sand, and shells, about twenty feet high, in horizontal laminae of an inch thick, with narrow vertical strata of pure lime. Fine-grained sienite has been found at Mount Henly station, on the Wannon river.

The country between the Murray and the vicinity of Lake Omeo shows, on an extensive scale, the primitive and secondary rocks: argillite and quartz rock on the one side to the east; old red sandstone, with conglomerates, on the other to the west; the petrosiliceous porphyry, as intermediate or transition rock, appears as if only to indicate their respective limits. The numberless streams of lava, the trachitic rocks, and others, which, through intense heat, have had some of their constituent ingredients

altered, give evident proofs of volcanic agency, to which Lake Omeo may have originally served as a laboratory.*

MINERALOGY.—The volcanic character of the country indicates the presence of rich minerals, but, as yet, little attention has been paid to the subject. Copper and lead ore have been found on the banks of the Barwon river, in the Geelong district. The specific gravity of the lead ore is 6.4 per cent. Copper ore, lead, platina, and manganese, have been discovered along the coast from Point Urquhart to Moonlight Head, at Cape Otway. The ore runs in horizontal veins of four miles in breadth, varying from east-north-east to west-south-west. The specimens of copper ore collected in this district yielded, on an average, forty-five per cent. of copper.

The rivulets Merri and Darebin, in Melbourne district, are strongly impregnated with aluminous matter. *Ironstone* abounds in several districts, usually in the shape of pebbles strewed over a plain. Surveyor Hoddle, in his survey of the country near Melbourne, found that seventy-five per cent. of this stone consisted of iron ore; and so powerful was its effects upon the instruments of the surveyors, as to render it necessary to sell the sections of land at a certain number of acres, more or less, it being found impossible, in some situations, to obtain correct measurements. The sides of Mounts Elephant and *Nanime*, particularly those of the latter, are covered with a quantity of scoriæ somewhat resembling the refuse of smelted iron. These mounts bear every appearance of having had a volcanic origin; their form is that of a horse-shoe, open to the westward; the interior sides slope down almost to a level with the exterior bases.

Gold is reported to be plentiful in the Pyrene mountains, distant about 100 miles from Melbourne. It is said to have been discovered by a shepherd lad, who, after selling his gold at the city, returned to seek for more; he was followed by some persons, and not having since been heard of, is supposed to have been murdered. Dr. Clutterbuck saw, in 1849, at the shop of Mr. Brentani, a watchmaker and jeweller, at Melbourne, several pieces of native gold—one lump, of great purity, weighing twenty-one ounces, exhibited minute portions of quartz, was soft in texture, easily cut with a knife, of uneven surface, somewhat oblong,

* Report by Count Strzelecki to Sir G. Gipps.

and more than an inch in thickness, as it taken from a perpendicular fissure in the rock. Mr. Brentani is said to have a lump weighing seventy-two ounces. The commander of the ship *Berkshire*, which left Port Phillip for London, 25th February, 1849, purchased fourteen ounces of the native gold from Mr. Brentani at eighty shillings per ounce. Gold-dust has been found in the river *Plenty*, in the bed of the stream, which consists chiefly of mica. Quartz sent to England for analyzation, yielded twenty-eight ounces of gold for each ton of ore. [*Note.*—Since the foregoing was written my prognostications of the abundance of gold in Australia have been verified: the results are given in the Supplement.]

Salt is obtainable in abundance from the waters of the interior lakes. Professor Faraday examined specimens of the waters collected from the salt lakes by Sir T. Mitchell, and stated that all of them were solutions of common salt, much surpassing the ocean, or even the Mediterranean, in the quantity of salt dissolved. Besides the common salt, there were present (in comparatively small quantities) portions of sulphates and muriates of lime and of magnesia; the waters, except in strength, very much resembled those of the ocean. Three drams of the waters of lake *Cockajemmy* yielded 113 grains of dry saline matter, others seventy-seven grains. A quantity of the salt deposited on the shores of Lake Bolac, analyzed by Dr. Anderson, of Edinburgh, gave the following results:—chloride of sodium (common salt), 99.654; sulphate of soda, 0.104; chloride of magnesium, 0.052; insoluble residue, 0.190; lime, a trace=100.000. It was described as “a remarkably fine looking salt.” When the summer heat has caused great evaporation, the bed of a lake is sometimes found quite dry, and covered with salt crystals to the depth of three or four, or even six inches, within the usual water mark. In the vicinity of Lake Corangymite, the settler has only to send a bullock-dray in the morning, with a few men, and it returns in the evening with a load of two tons weight. For the curing of meat, and the improvement of the soil, this mineral will be found very valuable.

These salt lakes are found in the region where there are several extinct craters. The production of salt is not unfrequently accompanied by volcanic action, as in Sicily and other places. Many of the rocks near the salt lakes of Australia are of the trap

formation; and Sir T. Mitchell states that a dark-coloured soil is found in the ridges about some of these lakes. I am disposed to think that the deposits of salt are obtained from the saline earth, rather than to agree with Sir T. Mitchell, that "the sea deposited the water in these situations at no very remote period." Some of the lakes have been filled again and again by rain and fresh river-water, but the summer evaporation annually leaves a fresh deposit of salt.

Very good limestone is quarried at Point Nepean, the head of the Port Phillip bay; and lime of fine quality, used as stucco for the outsides of houses, walls, and columns, is made from oyster and cockle shells, of which extensive beds are found around the bay. The whole of the coast line from the Glenelg river to Port Fairy (eighty miles) is of limestone formation, and this probably extends some distance into the interior. In the northern part of Alberton district there is a great quantity of limestone of various kinds, some white, some blue, and some black; and on the banks of the Mitchell river, about twenty miles from Lake King, there are large banks of oyster and other fossil shells under a thick layer of earth. A hill of marble was seen by surveyor Stapylton near Mount Macedon.

Coal is found at Western Port, but no mine is yet worked. It is also stated to exist to an almost unlimited extent near Loutit bay, which is about three miles from Cape Otway. The coal lies in large quantities along that part of the coast.

The following abstract of the report of Mr. Cameron, who was deputed by the local authorities at Melbourne to examine the coal region at Western Port for her Majesty's government, dated November, 1840, will indicate the nature of the mineral found in this part of Australia:—

"Upon my arrival at Western Port, I commenced to examine minutely the several seams of coal which presented themselves superficially, lying to the eastward of the bay, which I found situated at such an angle of depression as to be wholly unworkable.

"There were four veins of coal, which were more or less associated with a soapy clay, sandstone, and greystone, and which varied in thickness from one inch to nearly three feet. Upon combustion, these coals emitted a very strong and fierce heat, depositing heavy bases, bearing a yellowish tinge or cast. From the tossed and shattered appearance of these several veins, an indication is manifested of the close affinity of some extensive dyke-fault or trouble, as dislocations in the coal strata are technically denominated.

"Having traced the coal measures throughout the

direction of Cape Patterson, about twelve miles to the eastward of the port, I discovered various straggling open seams (termed the crops) of coal, varying in quality and thickness from two inches to four feet, and lying at such an angle as to be rendered available for mining. Here, as in Western Port, the coal is associated with greystone, sandstone, &c. In some, however, of the veins, the coal is of excellent quality, possessing a considerable proportion of bitumen, which would render it especially desirable for the purposes of gas, for exportation to Sydney, or for consumption at the towns of this province hereafter, when the public convenience of gas shall be introduced.

"The lofty and precipitous character of the rocks upon the coast exposed to view a section of strata which induced me to advance some miles farther than the strict line of my instructions directed. On approaching towards that part of the coast which inclines towards Cape Liptrap, I found the coal strata increased in thickness and regularity; but, from an accident which occurred to me at this period, whilst prosecuting my researches, I was precluded from following up my observations with a close examination. These were, nevertheless, sufficiently justificatory of my suggestion, that, in any future search for coals, this portion of the district should be minutely examined. The increased thickness and regularity of the measures strongly indicate, though not positively, the association of more extensive beds or seams of coal."

Mr. surveyor Smythe, who explored the south-east coast from Point Urquhart to within about fifteen miles of Cape Otway, says that extensive veins or seams of coal commence at a point thirty miles from the Port Phillip heads, and dip in every direction, the general bearing being north-north-west and south-south-east. The mineral seems to abound over a considerable extent of country. It is described as "in large seams of four feet in thickness, extending from 400 to 600 feet in length; as burning well, with little or no smoke, and leaving a fine white ash, resembling the purest description of cannel coal."

SOIL.—An earth formed of decomposed lava has in every country been found to possess extraordinary fertility. In the West Indies, in Sicily, and other countries, where volcanoes are in full activity, the inhabitants brave the dangers of the burning lava, on account of the richness of the surrounding region. A large part of the territory between Melbourne and Portland (nearly 200 miles) is of the dark chocolate-coloured soil, peculiar to a volcanic country; it is not surprising, therefore, to hear of wheat attaining a height of seven feet, and yielding sixty to seventy bushels per acre; oats, ninety bushels per acre; maize, 100; and other crops an equally valuable return for the labours of the husbandman. To the west-

ward of Geelong, for a distance of nearly 200 miles, there is an almost continuous succession of whinstone and other allied rocks, affording the basis of a soil which usually characterizes a rich agricultural country. Over this extensive region the extinct volcanoes give a picturesque variety to the well-grassed plains, the clumps of timber upon hill and dale, and the long lines of gum trees that mark the courses of the winding creeks. This country is being rapidly occupied.

Mr. Malcoln, an intelligent settler and stockowner in Australia, in his evidence before a committee of the New South Wales Legislative Assembly, in 1845, stated that he had travelled extensively in England and Scotland, and had seen large tracts of land in the Port Phillip province as rich as any he had seen in Great Britain. The district of Lake Colac, for about 200 miles, is "as good land as ever plough was put in." There are thousands of acres adjoining Lake Colac clear of timber. Keeping the south side of the lakes, the country, all the way from Colac lake to Port Fairy, Portland Bay, and the Glenelg river, is a fine grazing country; a great part of it is too rich for sheep. The land north of the lakes is said not to be so good; but still well adapted for stock.

In the splendid country between Geelong, Lake Colac, and the Glenelg river, there is a soil unsurpassed in point of fertility. The tracts suited for cultivation are not confined to the banks of rivers or creeks, but extend generally in all directions, and the rains being regular, and the country not subject to drought, the pasturage throughout the year is perfectly sufficient to feed stock without artificial food, and to produce fat cattle, unsurpassed in any other part of the world.

In the district of Lake Colac, and around Mount Leura, there is much land, of which the natural pasture would maintain a bullock an acre all the year round; whereas the best land in Somersetshire, England, is allowed to be only capable of sustaining a bullock and a sheep for seven months, the animals being stall fed during the other five.

The richness of the soil is seen in its vegetation; Dr. Clutterbuck says that the daisy, buttercup, and the pretty but inodorous violet, are seen everywhere; the *Flora* are exceedingly beautiful, and, in the spring, literally carpet the ground; the wild geranium, a diminutive plant bearing a tiny pink flower, grows abundantly; two most lovely creepers are found growing in every

variety of soil—one bears a brilliant scarlet flower not unlike the laburnum in shape, the other has tufts of a blue colour, resembling the double violet; the balmy perfume of the golden and silver wattle (the mimosa tribe) is exhaled far and near; the brunonia, bearing a flower in colour like ultramarine, in many places covers the surface with "nature's most exquisite embroidery;" the musk plant and hyacinth are indigenous; the English pelargonium and fuschia blossom throughout the greater part of the year; and European vegetables and fruits attain a size "which would excite astonishment in the mind of a Covent-garden fruiterer."

In most parts of the district finely open and undulating ground is to be found, adapted to the wants of the grazier and agriculturalist; in very many a rich black soil from eight to twelve inches in depth prevails, containing much decomposed vegetable matter with an argillaceous soil. Where this occurs, the valleys are composed of extensive, verdant, and fertile flats of vegetable mould. In some situations the soil is red, in others, a clayey hazel loam. The greater number of soils contain large portions of sand of various degrees of depth and fineness, and hence acquire the property of powerfully absorbing the rays of the sun. Admitting that some portions of the country are boggy, and a proportion sandy, rocky, and barren, yet, "millions of acres of good arable land are to be met with."*

CLIMATE.—The position of Victoria, to the southward of New South Wales, gives it a cooler climate than the more northern province. Fires are agreeable mornings and evenings, for eight months of the year. There is sufficient frost to freeze the surface of ponds for three or four days in winter (July), and snow falls occasionally on the low lands. The changes of temperature are occasionally rapid, but the "hot winds" are annually of brief duration. Port Phillip resembles, in its summer season, Baden, Marseilles, and Bordeaux; its winter, Palermo or Buenos Ayres; its fluctuations of temperature, those of Montpellier, and its annual mean is that of Naples. According to Count Strzelecki, the annual mean temperature of Port Phillip, is 61.3; mean for summer, 69.4; for winter, 53.3; summer maximum, 90.6; summer minimum, 48.8, winter maximum, 69.8; winter minimum,

* *Port Phillip* in 1849; by Dr. Clutterbuck, nine years resident in the colony.

36.9. *Warmest* month, November; *coldest*, July. The mean annual temperature is rather more than 61°, or about 12½° higher than the mean temperature of Croom's Hill, Greenwich, England. In the reading-room of the Mechanics' Institute, at Melbourne—fronting the south, and free of the sun—the thermometer, in the hottest summer, rarely exceeds 75° Fahrenheit. The summer evenings are in general clear and cool; the "hot wind" seldom has longer duration than one day; and the number of heated wind days in summer, is about twenty, of which, one-third are oppressively hot; but in a well-constructed brick or stone dwelling, with proper care to prevent the ingress of the heated draft of air, but little disagreeable sensation is experienced. For ten months

in the year, says Mr. Westgarth, the climate is unexceptionable; "the dryness and genial warmth of the air afford an almost daily access to the open country, and there appears, in the general buoyancy of the population, a degree of enjoyment of existence far beyond what is usually exhibited in the duller climes of the fatherland." In the western parts of the province, where Tasmania does not intercept the breezes and clouds from the great southern ocean, the temperature is lower, and the annual quantity of rain greater than at Melbourne. For the following table I am indebted to Mr. Westgarth, a merchant at Melbourne, who has materially contributed by his writings to the advancement of the province which he has adopted as his home:—

Meteorological Register for Melbourne, 1845-6, 130 feet above the level of the sea; lat. 38° 18' S.

Months.	Thermometer.			Barometer.			Rain.		
	8½ A.M.	2¼ P.M.	Wet Thermo- meter.	Highest.	Lowest.	Mean at 2½ P.M.	Number of Days.	Inches fallen.	Maximum in one day.
July . . . 1845	50.29	55.48	53.25	30.43	29.55	29.98	16	5.50	1.81
August . . . "	—	57.38	53.77	30.22	29.48	29.72	—	1.36	—
September . . . "	56.10	63.50	59.66	30.45	29.52	30.05	9	1.27	0.76
October . . . "	58.83	65.38	60.77	30.24	29.62	30.00	10	2.34	1.12
November . . . "	61.70	69.00	64.53	30.08	29.50	29.78	15	3.99	1.42
December . . . "	65.03	73.09	66.74	30.10	29.61	29.82	3	0.17	0.11
January . . . 1846	66.19	73.48	66.41	30.10	29.66	29.36	5	2.12	1.01
February . . . "	63.85	72.32	65.67	30.23	29.61	29.83	6	1.67	1.13
March . . . "	61.83	68.74	63.09	30.19	29.66	29.92	6	1.30	0.92
April . . . "	57.13	64.20	60.30	30.20	29.55	29.89	11	2.27	0.35
May . . . "	50.64	56.12	54.54	30.30	29.54	29.91	17	3.79	1.02
June . . . "	46.96	54.70	52.56	30.31	29.70	30.09	11	1.20	0.32

Note.—No Thermometrical return obtained for August at 8½ A.M.

The "hot winds" generally commence about the middle or end of November, and recur, at intervals, throughout the summer, until towards the end of February. At Melbourne, the hot wind has a N.N.W. direction during the summer; but the winds from the same quarter, in winter, are cold. During the prevalence of the hot winds, the sky is generally cloudless: the warmth materially abates after sunset. The scorching blasts are succeeded by a strong breeze from the southward, which occasions a fall in the thermometer of twenty to thirty degrees. During winter, snow sometimes covers the ground to the depth of three inches, and ice is formed of the thickness of a shilling. It will be observed, that more rain falls at Melbourne than in London. By means of the Australian Alps any desirable degree of cold may be obtained even in summer.

The climate of Victoria, as well as that of New South Wales, is occasionally deteriorated by a disease known as "catarrh," which breaks out in some localities among the sheep, and will destroy in three or four weeks, four or five thousand sheep in a flock. There does not seem to be any mode of checking the disease; and when it occurs, the flock-master has to resort to the "boiling down" system. The "scab" and "foot rot," also cause mortality in sheep, and there are stringent colonial laws to prevent the disease called "scab" spreading; sheep are prohibited being driven on the common roads, except in the month of February; notice must be given of the disease; and other stringent regulations must be adopted, subject to penalties of £10 to £20 for neglect. Licensed butchers are liable to be fined for slaughtering or exposing for sale infected sheep.

CHAPTER III.

POPULATION—EDUCATION—RELIGION—GOVERNMENT AND INSTITUTIONS.

POPULATION has been extraordinarily augmented; the comparative progress of increase in the inhabitants is thus shown, between the years 1836 and 1851:—

Places.	1836.	1841.	1846.	1851.
Melbourne, city. . .	—	4,479	10,954	23,143
Country districts . .	224	7,259	21,921	54,202
Total	224	11,738	32,875	77,345

[Note.—Details of census of 1851 given in Suppt.]

The *nationality* shows that, of the total population in 1846, there were born in the colony, 3,855 males, 3,728 females; in England, 7,407 males, 2,693 females; in Wales, 83 males, 38 females; in Ireland, 5,037 males, 4,089 females; in Scotland, 2,757 males, 1,468 females; in other British dominions, 800 males, 603 females; in foreign countries, 245 males, 76 females. Total, 20,184 males, 12,695 females=32,879. The *classification of occupations* shows in commerce, trade, &c., 2,254; agriculture, 1,722; grazing—management, of sheep, 4,666; of horses and cattle, 1,334; horticulture, 178; other labourers, 2,673. Mechanics and artificers, 3,635; domestic servants, 1,201 males, 2,136 females; clerical profession, 29; legal ditto, 96; medical ditto, 106; other educated persons, 476. All other occupations, 1,983. Residue of population, 25,232. The *civil condition* in 1846 was, free-born in the colony, or arrived free, 17,553 males, 12,488 females; other free persons (meaning thereby those who had formerly been prisoners), 2,363 males, 202 females. *Bond*, holding tickets of leave, 230 males, 5 females; in government employ, 18 males; in private assignment, 20 males.

The prison population had its origin in the circumstance of the Port Phillip province being a district of New South Wales. The inhabitants have been very strongly adverse to the introduction of convicts, and recently the superintendent, Mr. Latrobe, was necessitated to prevent the debarkation of prisoners from two ships which had been despatched direct from England with convicts who had gone through a large probationary period in penitentiaries in the United Kingdom. The

feeling evinced against the introduction of criminals, however great may have been their alleged reformation, was quite as strong as that exhibited by the inhabitants of the Cape of Good Hope. By this time (June, 1853) there is, most probably, no trace in Victoria province of the convict system.

We have no returns of the number of the aborigines within the limits of the province. Their respected "Protector," Mr. Robinson, during various journeys, found on the banks of the principal rivers a comparatively dense aboriginal population. There are several mixed breed, or "half castes," of both sexes.

According to the census of 1846, the white population was thus distributed:—

County or District.	Males.	Females.	Total.
Bourke County . . .	9,440	7,890	17,330
Grant "	2,359	1,531	3,890
Normanby "	1,455	812	2,267
Gipps Land District .	612	240	852
Murray "	1,142	416	1,558
Western Port " . . .	2,516	1,009	3,525
Portland Bay " . . .	2,675	798	3,473
Total	20,199	12,696	32,895

The key, with numbers attached to the excellent map of Mr. Ham, published at Melbourne in 1847, gives the names of the landed proprietors, and of the squatters in each division. In *Bourke county* the number of proprietors was then 69; in *Grant county*, 72; in *Normanby county*, 72; in *Western Port district*, 192; the *Murray district*, 149; *Wimmera district*, 67; *Portland Bay district*, 232; and *Gipps Land*, 44. Mr. Ham adds a district which he terms the *Tumut district*, between the Murray river and the Murrumbidgee, but this region belongs to the territory of New South Wales.

Melbourne city is divided into four wards; in 1846 each ward was thus tenanted:—

Name of Ward.	Males.	Females.	Total.
Gipps	1,738	1,602	3,340
Bourke	976	929	1,905
Lonsdale	1,481	1,176	2,657
La Trobe	1,557	1,495	3,052
Total	5,752	5,202	10,954

POPULATION OF VICTORIA CLASSIFIED IN 1846.

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Of the population of the city of Melbourne in 1846, there were—born in the colony, or arrived free, males, 5,551; females, 5,161: other free persons—males, 218; females, 38. *Bond*—holding tickets of leave, males, 18; females, 1: in government employment, males, 7.

good indication of augmenting prosperity. The various eligible positions on the coast, and on the interior rivers for maritime and military stations, will cause an equable diffusion of wealth and civilization over the province.

[*Note*.—The augmentation of population since the gold discoveries in 1851 has been very large, as will be shewn in the Supplement to this Volume.]

Abstract of the Population on the 2nd March, 1846, in each of the Counties and Commissioners' Districts.

Counties.	Males.					Females.					Totals.		General Total.
	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Males.	Fe-males.	
Bourke	2518	962	538	4843	579	2495	917	680	3512	287	9440	7891	17331
Grant	515	153	135	1377	159	500	152	148	680	51	2339	1531	3870
Normanby	182	98	61	935	79	283	91	45	369	24	1455	812	2267
Total	3315	1213	734	7155	817	3278	1160	873	4561	362	13234	10234	23468
Commissioners' Districts, beyond the Limits of Location.													
Gipps Land	98	32	36	390	56	81	24	19	107	9	612	240	852
Murray	169	40	31	810	92	139	32	30	205	10	1142	416	1558
Portland Bay	275	80	72	2117	133	289	50	27	418	15	2677	799	3476
Western Port	354	135	116	1726	188	367	86	52	463	38	2519	1006	3525
Total	896	287	255	5043	469	876	192	128	1193	72	6950	2461	9411
Total Population	4211	1500	989	12198	1286	4154	1352	1001	5754	434	20184	12695	32879

Abstract of the Population on the 2nd March, 1846, in the City of Melbourne, and in each Town and Village

Towns and Villages.	Males.					Females.					Totals.		General Total
	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Males.	Fe-males.	
Melbourne (city)	1,561	617	331	2,959	286	1,608	592	480	2,346	174	5,754	5,200	10,954
Ashby*	28	6	—	43	2	26	6	5	30	4	79	71	150
Belfast*	36	8	5	89	13	40	5	7	63	3	151	118	269
Brighton*	117	28	9	106	12	65	38	16	111	7	272	237	509
Brunswick*	23	10	5	38	9	23	9	9	31	7	85	79	164
Geelong (North)	111	35	40	380	28	107	45	43	180	13	594	388	982
Geelong (South)	48	20	7	101	12	70	19	18	85	8	188	200	388
Irishtown*	28	4	2	34	3	23	4	7	29	1	71	64	135
Newtown*	53	6	5	59	4	44	14	11	57	3	127	129	256
Portland	68	26	8	163	13	80	35	13	100	4	278	232	510
Richmond*	62	20	8	82	13	74	30	14	93	6	185	217	402
Williamstown	45	14	8	93	12	58	9	11	70	2	172	150	322
Total urban Population	2,180	794	428	4,147	407	2,218	806	634	3,195	232	7,956	7,085	15,041

Note.—The mark (*) attached to the name of any town or village, indicates that it is situated on private property.

The population, by ages, of the province was:

In 1846, the population in the following towns is thus shown: [For 1851 see Suppt.]

Years of Age.	Males.	Females.
Under 7	2,689	4,154
7 and under 14	1,500	1,352
14 " " 21	989	1,001
21 " " 45	12,198	5,754
45 " " 60	1,122	393
60 and upwards	164	41

Name of Town.	Males.	Females.	Total.
Geelong	1,149	916	2,065
Belfast	359	242	601
Portland	278	232	510
William's, about	—	—	250
Alberton "	—	—	100

Proportion of married to single in 1846:—

Counties and Districts.	Married.		Single.	
	Males.	Fem.	Males.	Fem.
COUNTIES:—				
Bourke	3,264	3,383	6,196	4,507
Grant	716	696	1,623	835
Normanby	—	—	—	—
DISTRICTS:—				
Portland Bay	402	403	2,273	395
Western Port	506	474	2,011	534
Murray	224	222	918	194
Gipps' Land	107	114	505	126
TOWNS:—				
Melbourne	2,107	202	3,665	3,000
Geelong	274	256	507	333
Portland	101	99	177	133
Belfast	101	107	251	135

Note—There are no returns for Normanby.

The total married was—males, 5,564; females, 5,656; unmarried, males, 14,620; females, 7,039. *Bond* population in 1846: holding tickets of leave, males, 230; females, 5; in government employment, males, 18; in private assignment, males, 20 = 268.

Religious denominations.	1841.	1846.
Church of England	6,190	14,921
„ Scotland	2,044	5,856
Wesleyan Methodists	650	1,597
Other Protestant dissenters	346	1,169
Roman Catholics	2,441	9,075
Jews	57	117
Mahomedans and Pagans	10	27
Other persuasions	—	117

In 1847 the province was divided into sixty-nine parishes.

Number of houses in 1841 and 1846:—

Year.	Stone or Brick.	Wood.
1841	450	1,040
1846	1,835	3,363

The number shingled, *i.e.* roofed with small pieces of wood, was, in 1846, 3705; and of slated, 76. The number of houses finished was 4,547; unfinished, 651; inhabited, 5,070; uninhabited, 128.

There is an abundance of the necessaries of life, and great comfort among all classes of the people. Dr. Clutterbuck, the most recent authority on the state of the colony (1849), in evidence of the condition of the working classes there, points “to the cottage of the mechanic or daily labourer, each surrounded by his family of children; on the breakfast table are seen a large dish of rump-steak, or mutton chops, eggs, fresh butter, excellent bread, and tea or coffee; the dinner table is equally bountifully supplied, the cup

foaming with colonial ale, being a never-failing accompaniment, tea and a substantial supper succeed. Think of these things, ye suffering poor at home. Fancy yourselves also strolling in the bush, and arriving at a station where, on some occasions, you see fore-quarters of mutton lying about in a state of putridity, and ask yourselves the question—‘whence this shameful waste of the bounties which God has given?’ and obtain the reply of the master—‘our men refuse to eat this portion of the animal, and owing to the scarcity of labour we are compelled to submit to their dictation.’”*

The weekly rations allowed to shepherds or hut-keepers consist of flour, 10 lbs.; meat, 12 lbs.; tea, $\frac{1}{4}$ lb.; sugar, 2 lbs. It is computed that the cost of maintenance for a man is five shillings per week. The duty of the *hut-keepers*, of whom there is usually one to each flock, is to shift the hurdles daily, prepare the daily meals for the shepherds, and watch the sheep by night from a little “crib box.” One shepherd usually attends 1,000 sheep; but in an open country one man may have 1,500 or 2,000 confided to his care. According to Dr. Clutterbuck the current rate of wages, in addition to rations, given by squatters in 1849, was—shepherds, £20 to £25; hut-keepers, £18 to £22; bullock drivers, £24 to £28; married couples, with a family, £25 to £30; ditto, without encumbrance, £34 to £40; single females, £16 to £20; wheelwrights, £25 to £30; carpenters, £30 to £40 sterling per annum. Farm servants, 10s. per week; sheep shearers, 10s. to 13s. for every 100 sheep; or without rations, 15s. per 100 sheep. The town rates of wages are—female cooks, £18 to £24; men ditto, £20 to £28; housemaids, £16 to £18; nurses, £12 to £16; grooms, £25 to £32; laundresses, £20 to £28 sterling per annum. Charwomen, 2s. 6d. to 3s.; and needlewomen, 1s. per day. Washing, 2s. 6d. to 3s. per dozen.

Retail Prices of various Commodities.—Beef and mutton 2d., veal and pork 5d. to 6d., bacon 8d. to 1s., tea 1s. 6d. to 3s., sugar (fine moist) 3d. to 4d., butter 10d. to 1s. 2d., cheese 7d. to 8d. per lb.; ale (colonial), 5d. per quart; bottled ale and porter (English), 10s. to 12s. per dozen; flour (fine) £10, seconds £9, per ton; wheat, 3s. to 5s. per bushel; potatoes, 3s. to 4s. per cwt.; milk, 4d. per quart.

In the year 1840, flour was sold for £90 per ton; bread, 2s. 6d. the quartern loaf;

* *Port Phillip* in 1849, p. 108. London: 1850 Parker, West Strand.

butter, 3s. per lb.; cabbages, 6d. each; potatoes, 1s. per lb. Dr. Clutterbuck says that at this period he employed labourers, in the erection of a house, at a cost of 15s. per day each; but then he adds, "port and champagne were among the ordinary luxuries of the artisan."

EDUCATION.—According to the decision of the governor of New South Wales respecting education, it was ordered, on the 24th of September, 1841, that in towns or places of which the population amounts to 2,000 or upwards, local government aid be given for education, to any school, at a rate not exceeding one penny each day for the actual attendance of every child in the school, whose parents or friends are in such a station of life as to render it necessary to extend to them the assistance of government. Where the population does not amount to 2,000, the aid afforded may be as high as one penny farthing per diem, or one penny halfpenny, if there be no other receiving aid from government within five miles. The government aid cannot exceed the sum raised for the support of the school from private sources, nor be in excess of £25 per quarter, unless the number of children attending the school, or the poverty of their parents, be such as to make a special exception in favour of it necessary.

School inspectors, appointed by government, visit the different schools in their respective districts at uncertain times, but never less than twice in every month, muster the children, and compare the numbers present with the numbers entered on the registers of daily attendance kept by the masters or mistresses of the schools. The inspectors report to government any irregularity or misconduct which may fall under their notice. Police magistrates act as inspectors of schools. Quarterly lists are required by the government from each school, containing the names of all children who attend the school, their ages, and also the names, places of abode, trade or calling of their parents or nearest friends.

A diocesan grammar school has been recently established at Melbourne, through the instrumentality of the bishop. The annual fee is £10 10s.; entrance fee, £2 2s., and £1 1s. for every additional boy of the same family. The school is open to all persons without distinction, and the object is to give a sound scriptural and general education. There are also two private schools for girls, and two for boys at Melbourne.

There are about forty schools, with 5,000 pupils, in different parts of the province.

In 1846, the state of education, according to the census of that year, was as follows:—

State of Education.	Males.	Females.	Total.
UNDER 21 YEARS.			
Cannot read	4,005	3,863	7,868
Read only	1,052	1,138	2,190
Read and write . . .	1,643	1,506	3,149
ABOVE 21 YEARS.			
Cannot read	1,797	988	2,785
Read only	1,484	1,274	2,758
Read and write . . .	10,203	3,926	14,129

RELIGION.—The contrast between the earlier and present state of society, is very visible; a higher moral tone is gradually spreading in the community, and this improvement, in the estimation of many, dates from the arrival (in January, 1848) of the bishop, "one in whom are united the highest learning, humility, and piety." Heretofore the people at the distant stations in the interior, had existed in almost a heathenish state; the good bishop has ridden many hundred miles to exhort, and instruct, to celebrate the holy rites of baptism and confirmation, and to administer the blessed sacrament. His lordship was accompanied from England by three clergymen, has ordained four more since his arrival, and as fast as practicable, is locating ministers of the Gospel at eligible stations in the country. Prior to the arrival of the bishop (Dr. Perry, formerly district preacher of St. Paul's, Cambridge) only one clergyman had been appointed by government to superintend the Church of England in this large district. From 1840 to 1848, this zealous man (the Rev. Adam Compton Thompson) had to perform the whole of the duties, and has been known in *one day* to perform the burial service over six persons, the marriage ceremony for three couple, to baptize four children, and to visit the sick in Melbourne and its suburbs. It cannot be denied that grievous neglect has been evinced in this matter, for primary functionaries in a colony founded by a Christian people, before the appointment of judges, magistrates, police, and custom-house officers, ought to be the ministers of the Gospel.

The efforts recently made by the British government for the protection and instruction of the aborigines of Australia, is highly creditable. During the secretaryship of Lord Glenelg, the appeals of the London Aborigines Protection Society were received

with attention, and protectors were appointed to watch over, instruct, and if possible convert to Christianity the dark-coloured migratory races among whom we have established ourselves. The Port Phillip territory is divided into districts, in each of which is placed an assistant protector, and a medical officer, or assistant, with a homestead, and reserve of land, for the exclusive use of the aborigines. Agricultural operations are now carried on by the natives. Those who are able are expected to give an equivalent for what they receive; the sick, aged, and young children are rationed. A missionary is appointed to each establishment, an overseer to superintend agricultural operations, and a constable, to keep order. The salary and allowances of the protector-in-chief are £600 per annum. The salary of the assistant-protector is £250 per annum, and ten shillings and sixpence a day allowance. They are to travel among and sojourn with the native tribes, and by every means in their power endeavour to induce them to adopt a settled mode of existence. They are required to furnish statistical and other information connected with the native tribes of their respective districts; the boundaries and aboriginal names of districts occupied by each tribe, the differences of language, customs, and habits, the names of mountains, lakes, rivers, and other localities; a census distinguishing the number of each family, name, age, sex, tribe, and chief of tribes, whether warrior, councillor, or elder, &c. The Port Phillip province is divided for the above-named purposes, into four districts, viz., the Goulburn River, Mount Macedon, Portland Bay, and Western Port, or Melbourne district. At the homestead on the Goulburn river, 110 miles from Melbourne, the aborigines had, in 1842, cut down, grubbed up, and burned 450 acres; cleaned and broken up for cultivation, about twenty acres; and obtained good crops of wheat, oats, and barley, and about two tons of potatoes. They have built good houses for the assistant protector, medical officer, and overseer, and constructed huts for themselves. The women manufacture baskets, mats, string, &c.

The *Newspaper Press* of the province is coeval with the formation of the settlement, for a newspaper seems nearly as essential to an Englishman as the air he breathes.

The first newspaper, in 1836, appeared in manuscript; the enterprising projector, however, quickly obtained from Van Diemen's Land the requisite materials wherewith to

print it, and it appeared under the title of the *Port Phillip Patriot*. In the early part of 1837, the *Port Phillip Gazette* was issued, edited by Mr. Arden; and soon after a third appeared, styled the *Port Phillip Herald*. Each of these journals was issued bi-weekly, by which arrangement the colonists had even then the opportunity of having a newspaper on their breakfast tables every morning. Four newspapers are now issued at Melbourne daily (Sundays excepted), namely, the *Morning News*, *Daily News*, *Patriot*, and *Argus*. At Geelong the *Advertiser* is issued daily, and the *Victoria Colonist* I believe weekly. These papers are as large as the *Globe* or *Standard*. The copy of the *Argus* before me (Vol. ii. No. 106, July 11, 1849) contains fifteen columns of advertisements. The "editorials" of those papers, their "original correspondence," poetry, and selected articles, typography, and paper, place them on a par with the journals of the United Kingdom, except the leading metropolitan newspapers. The price of these daily Port Phillip papers is fifteen shillings per quarter, or sixpence for a single copy; for advertisements, six lines and under, three shillings, for every additional line three pence. The Portland district has three ably conducted newspapers, two printed and published at Portland and one at Port Fairy. A *Port Phillip Magazine*, and other periodicals, still further attest the rapid extension of the "fourth estate," whose progress is indeed unequalled in any other portion of the British Empire.

GOVERNMENT.—Under the provisions of the bill now before Parliament, Victoria will have a government appointed by the crown, and a Legislative Assembly similar, in constitution, to that of New South Wales, and the other Australian colonies. It is uncertain whether any alterations will be made in this bill in the House of Lords; and therefore it is unnecessary to note any other details than those already given. (See p. 550.) It is understood, that her Majesty's ministers do not now propose to vest the control of the waste or crown lands in the Australian legislatures, which conforms to the opinion I ventured to express in the published division of this work on New South Wales. [For alterations see Supp.]

The *Laws*, are the same as in England; and administered, as in New South Wales, by a judge and supreme court.

INSTITUTIONS.—Several charitable, religious, literary, and benevolent societies, such

as have been described in the previous colonies. Among other associations, may be mentioned a Mechanics' Institution at Melbourne, and another at Geelong; an Auxiliary Bible Society; a Theological Education Society; Temperance Society; Harmonic Society; Union Benefit Society; Independent Order of Odd-Fellows; a Commercial Exchange; an Auction Company; Fire and Marine Insurance Company; Port Phillip Steam Navigation Company; public hos-

pital, &c. The *Port Phillip Bank* was wrecked in the general disasters of 1842-3. The proprietary of the Port Phillip Bank, in 1840-1, elected me a London director, and I recommended a course of procedure which met the approval of their intelligent agent in London, Mr. Gardiner, but it was not followed in the colony. There are branches of the *Union Bank of Australia*, and of the *Bank of Austral-Asia*, which are known to be conducting a profitable business.

CHAPTER IV.

PRODUCTS—WOOL, LIVE STOCK, TALLOW, PRESERVED MEAT, WINE, FLAX, TIMBER
FISH, &c.—COMMERCE—IMPORTS—EXPORTS—REVENUE—EXPENDITURE—
LANDS—EMIGRATION AND SQUATTING INTERESTS.

PRODUCTS.—The first in value, and present importance, as in New South Wales, is wool. The quantity imported into the United Kingdom, from Port Phillip and Portland Bay, since 1846, previous to which period many of the Port Phillip and Portland Bay wools were shipped for England, *via* Van Diemen's Island, was in 1846, 20,956; 1847, 27,876; 1848, 37,351; 1849, 45,348 bales. The bales average about 280 lbs. each. The exports of wool from Victoria province to the United Kingdom, in 1849, amounted to 12,697,440 lbs. The total imports of wool into the United Kingdom for the same year, were 298,444 bales, of which Port Phillip and Portland Bay contributed nearly one-sixth part. Sydney sent 50,584; Van Diemen's Island, 17,926; South Australia, 10,400; Western Australia and New Zealand, 1,474 bales. The total exports of wool from the Austral-Asian settlements during the past year, consisted of 125,732, or nearly one-half the entire importations into the United Kingdom; while, in 1812, only *three* bales were imported from Australia. The progress of the wool trade is so remarkable—the augmented importation has such an important influence on one of the largest branches of English manufacture—on the domestic comfort of the people—on the extension of our foreign commerce, and on the increased employment of shipping, that I am induced to give the following statement of the quantities of wool imported from our various colonies, and from different

foreign countries, for the past half century, and for which I am indebted to the respected wool brokers, Messrs. C. Jacomb and Son, of Basinghall-street, London. It will be observed, that the imports from Spain and Germany, our former great sources of supply, have materially decreased of late years, while the production of our colonies has largely and steadily increased.

The augmented supply has reduced the price of all wools; Port Stephens fleeces, that a few years since fetched 5s. to 6s. a pound, do not now bring more than 2s. In the London price currents the Australian wools are distinguished by the words—Sydney, Port Phillip, Van Diemen's Land, Adelaide, Swan River, and New Zealand, to represent the different colonies. The usual classification of the qualities of the wool, and the range of price will be seen in the following extract from the London sales for May, 1850, of wools from Port Phillip, which, although improving, are still inferior to the Sydney wools, but superior to those from Van Diemen's Land, or from Adelaide:—Extra flocks, in first-rate condition, 1s. 8d. to 1s. 11½d. per lb.; good flocks, in fair condition, 1s. 6d. to 1s. 8d.; average do., 1s. 3½d. to 1s. 6d.; ordinary and ill-conditioned flocks, 1s. 2d. to 1s. 3½d.; scoured clothing, 1s. 6d. to 2s.; scoured lambs', 1s. 7d. to 1s. 10½d.; handwashed and ordinary skin, 1s. 1d. to 1s. 4½d.; lambs' good, 1s. 6d. to 2s. 2d.; lambs' inferior to average, 1s. 2d. to 1s. 6d.; locks, broken, &c., 10d. to 15½d.; in grease, 8d. to 1s

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Importation of Wool in Bales into the United Kingdom during the following years.

Years.	Sydney.	Van Diemen's Land.	Port Phillip.	South Australia.	W. Australia & N. Zealand.	Cape.	East India.	German.	Spanish.	Portugal.
1796	—	—	—	—	—	—	—	41	16,699	412
1797	—	—	—	—	—	1	—	394	24,330	69
1798	—	—	—	—	—	—	—	622	10,219	541
1799	—	—	—	—	—	—	—	2,342	14,752	6,366
1800	658	—	—	—	—	—	—	1,170	30,318	9,622
1801	1,302	—	—	—	—	85	—	598	26,989	5,015
1802	353	—	—	—	—	146	—	1,217	28,237	2,751
1803	18	—	—	—	—	78	—	680	21,778	1,280
1804	164	—	—	—	—	7	—	62	34,962	230
1805	1,203	—	—	—	—	—	—	67	34,298	1,113
1806	564	—	—	—	—	—	—	1,953	27,228	1,666
1807	74	—	—	—	—	7	—	548	51,458	1,645
1808	128	—	—	—	—	10	—	225	9,808	170
1809	14	—	—	—	—	3	—	1,753	21,418	5,385
1810	83	—	—	—	—	15	—	2,221	2,976	16,772
1811	9	—	—	—	—	11	—	102	12,951	9,946
1812	3	—	—	—	—	10	—	—	10,735	25,970
1813	—	—	—	—	—	—	—	—	—	—
1814	70	40	—	—	—	9	—	9,807	33,622	13,953
1815	151	92	—	—	—	11	—	8,964	24,649	6,351
1816	47	—	—	—	—	10	—	8,047	14,795	2,876
1817	—	—	—	—	—	20	—	13,761	31,418	4,699
1818	255	170	—	—	—	22	—	24,092	43,803	6,582
1819	170	150	—	—	—	27	—	12,827	27,664	9,046
1820	213	180	—	—	—	29	—	14,609	17,681	475
1821	421	281	—	—	—	58	—	24,615	34,845	592
1822	347	207	—	—	—	77	—	31,786	29,972	626
1823	1,001	908	—	—	—	32	—	35,892	21,595	5,668
1824	972	519	—	—	—	43	—	44,035	25,104	2,459
1825	914	380	—	—	—	33	—	82,284	41,032	4,769
1826	2,905	1,525	—	—	—	175	—	30,219	8,097	2,665
1827	696	567	—	—	—	54	—	60,630	19,495	2,258
1828	3,087	3,209	—	—	—	51	—	62,901	19,043	1,644
1829	3,746	3,608	—	—	—	50	—	40,314	18,777	266
1830	3,998	4,005	—	—	—	—	—	74,496	8,218	2,319
1831	5,792	5,804	—	—	—	263	—	60,782	22,675	—
1832	6,313	4,170	—	—	—	360	—	55,185	13,684	—
1833	8,908	6,040	—	—	—	511	—	72,776	20,714	—
1834	10,327	5,952	—	—	—	647	—	62,553	19,339	—
1835	12,737	7,025	—	—	—	824	1,397	69,632	8,582	2,772
1836	14,055	8,728	—	—	—	1,716	3,493	90,450	20,451	—
1837	19,564	10,754	—	—	—	1,812	5,663	53,359	11,011	2,151
1838	21,950	10,250	—	—	—	1,996	6,117	79,320	8,577	2,694
1839	22,944	14,638	—	1,524	—	3,247	5,674	68,682	11,730	4,753
1840	25,820	11,721	—	3,484	—	3,477	7,611	63,278	5,273	1,569
1841	30,280	13,937	—	8,798	—	4,191	10,563	62,483	5,287	2,716
1842	26,668	13,922	—	12,307	—	6,521	11,876	47,510	3,118	1,887
1843	37,255	14,948	—	14,957	—	7,734	6,594	53,495	2,715	1,680
1844	38,077	15,126	—	17,705	—	8,659	6,741	70,305	5,682	6,341
1845	37,825	16,839	—	22,815	—	13,765	10,065	61,777	5,188	3,267
1846	39,112	13,656	20,956	5,994	1,686	11,626	11,279	52,922	4,809	3,274
1847	41,927	16,503	27,876	7,133	853	13,566	8,123	41,396	1,956	3,005
1848	46,612	16,095	37,351	9,827	1,056	13,409	16,923	48,478	403	2,922
1849	50,584	17,926	45,348	10,400	1,474	20,345	11,041	45,839	516	4,420
1850	51,463	17,468	55,378	11,822	2,548	19,879	9,704	30,491	2,105	7,361
1851	48,564	17,278	63,427	12,268	2,783	19,668	12,501	26,514	5,272	12,827
1852	50,062	18,026	61,885	12,552	3,242*	21,011	21,697†	36,114	903	7,746
Average weight. }	About 280 lbs.					3 Cwt.		1 to 2 Cwt.		

Note—There are no returns for the year 1813, owing to the London Custom House records being destroyed by fire.—From 1833 to 1835, inclusive, separate Returns were not kept of Wool importations from the ports of P. Phillip, S. Australia, W. Australia, and New Zealand; and from 1839 to 1845, inclusive, many of the Wools of these colonies were shipped *via* Van Diemen's Land.—* From Swan River, 1,025, New Zealand, 2,217=3,242.—† Including 588 from China.

WOOL IMPORTED INTO THE UNITED KINGDOM, 1796—1852. 275

Importation of Wool in Bales into the United Kingdom during the following years.

Years.	Russian.	Italian.	Turkey, Syria, Egypt, &c.	Peruvian, Sheeps', and Alpaca	Buenos Ayres and Cordova.	United States.	Danish.	Sundries.	Goats'.	Total Bales.
1796	21	7	8	17	—	—	7	32	—	17,244
1797	19	41	42	—	—	—	5	380	—	25,281
1798	—	—	—	—	—	—	—	130	—	11,512
1799	—	30	28	1	—	—	—	320	—	23,839
1800	25	84	76	—	—	—	14	473	—	42,440
1801	—	198	187	73	—	—	—	221	—	34,668
1802	1	186	174	210	—	—	—	1,326	—	34,601
1803	241	940	880	126	—	—	112	700	—	26,833
1804	482	627	605	24	—	—	205	230	—	37,598
1805	728	126	101	132	—	—	257	121	—	38,146
1806	207	60	58	110	—	—	57	64	—	31,967
1807	1,048	54	52	307	—	—	305	334	—	55,832
1808	27	130	124	407	—	—	6	22	—	11,056
1809	267	515	508	1,069	—	—	85	811	—	31,828
1810	868	683	676	601	—	—	207	142	—	25,244
1811	29	351	345	447	—	—	4	11	—	24,206
1812	259	6	4	261	—	—	92	12	—	37,352
1813	—	—	—	—	—	—	—	—	—	—
1814	1,031	426	421	112	—	—	307	3,801	—	63,599
1815	876	296	292	274	—	—	250	3,950	—	46,156
1816	699	262	257	1,308	—	—	220	1,476	—	29,997
1817	582	179	178	956	—	—	125	5,636	—	57,554
1818	1,666	1,015	1,051	2,358	—	—	510	10,850	—	92,374
1819	1,580	1,494	1,507	174	—	—	484	3,800	—	58,923
1820	150	334	380	25	—	—	20	1,459	—	35,555
1821	185	8	17	52	—	—	42	1,836	—	62,952
1822	554	5	10	32	—	—	170	4,356	—	68,142
1823	400	2	4	11	—	—	208	2,142	—	67,863
1824	631	377	395	852	—	—	220	2,236	—	77,843
1825	5,362	1,430	1,452	1,054	—	—	897	5,055	—	144,652
1826	1,650	534	547	5,068	—	—	320	1,189	—	54,894
1827	2,607	846	872	556	—	—	372	2,543	—	91,496
1828	2,706	425	434	929	—	—	715	1,214	—	96,358
1829	1,664	8	17	70	—	—	321	818	—	69,659
1830	1,680	14	29	64	—	—	323	3,672	—	98,818
1831	348	—	—	318	—	—	—	1,389	—	97,371
1832	997	—	—	2,445	—	—	—	639	—	83,793
1833	4,114	1,112	—	1,913	—	—	1,241	3,351	—	120,680
1834	6,910	4,761	14,983	8,498	—	—	1,547	760	—	136,277
1835	9,134	2,816	6,660	10,064	—	—	1,175	2,295	—	145,113
1836	15,072	3,754	14,714	16,653	—	—	4,488	14,762	—	208,336
1837	15,116	3,314	8,421	30,030	—	—	1,059	591	—	162,847
1838	8,826	4,434	4,249	30,378	—	—	1,388	1,593	—	181,772
1839	17,847	5,197	8,039	37,854	—	—	1,232	2,108	—	205,469
1840	11,776	4,055	5,492	40,000	—	—	2,199	320	—	186,079
1841	10,825	3,949	2,095	55,190	—	—	2,714	354	5,621	219,003
1842	14,199	573	1,439	19,956	—	—	1,475	358	5,967	167,776
1843	10,181	546	1,854	36,129	—	—	33	383	3,667	192,771
1844	16,984	5,310	9,564	24,565	—	—	424	3,684	5,165	234,332
1845	21,008	7,145	8,249	41,878	6,135	4,699	1,637	2,843	6,142	271,277
1846	11,451	4,247	12,520	56,574	1,076	2,440	1,408	1,550	5,231	261,811
1847	7,055	3,194	7,983	56,652	4,578	1,544	942	1,510	7,023	252,819
1848	7,402	1,502	6,272	56,438	6,463	139	678	1,067	5,468	278,505
1849	16,681	1,998	5,278	43,143	5,785	975	1,366	2,071	13,258	298,444
1850	9,758	1,536	11,896	39,731	3,841	35	771	2,235	13,139	291,161
1851	15,259	1,180	16,636	46,820	2,218	—	911	2,959	10,796	317,881
1852	13,687	1,754	16,812	38,453	4,761	65	704	5,317	11,104	325,895
Average weight. } }	3 Cwt.	Various.		84 lbs.	4½ to 8 Cwt.	Various.			1½ to 2 Cwt.	—

Note.—Until the year 1845, the Wool imported into Great Britain from Buenos Ayres, Cordova, &c., was entered in the Custom House returns as South American, with the return of Peruvian; and the Goats' wool imported to the year 1840, inclusive, was entered as from Turkey, Syria, Egypt, &c. The Peruvian sheep and Alpaca wool is in ballots of 84 lbs each.

It will be seen that the total number of bales imported in each year, from every country, from 1796 to 1852 inclusive, is given in the last column of this page.

Had we been dependent on foreign countries for the raw material of this staple branch of British industry, our foreign and domestic trade would have been crippled, not only by insufficient supplies, but by high prices. Estimating the imports for the year 1853 at about 350,000 bales, (or 100,000,000 lbs.), fully two-thirds of this quantity will be supplied from our transmarine territories in Australia, at the Cape of Good Hope, and in British India. I confidently look forward to a large progressive increase of this valuable branch of trade; for if we calculate the population of the United Kingdom at thirty million, it is not an unreasonable allowance to allot six lbs. weight of woollen garments annually to each individual, if they could be cheaply obtained. This would require a supply of 180,000,000 lbs. of wool yearly, for domestic use alone. Mr. McCulloch estimates the entire produce of British and Irish wool at 500,000 packs, of 240 lbs. each = 120,000,000 lbs.: the home and colonial wools would therefore be only equal to the wants for domestic consumption, and leave nothing for the export of woollen manufactures to our colonies and to foreign countries, a trade which is now carried on to the extent of nearly £7,000,000 sterling annually, and is still capable of great increase, as light woollen fabrics are as conducive to health in warm climates, as stout fleecy garments in cold regions.

I adverted, in the history of New South Wales, to the great national importance of the wool trade; but there are some other facts connected with this ancient branch of traffic and manufacture, which deserve a record in this work, in connection with the valuable staple product of our Austral-Asian settlements. For this collection of data, I am indebted to Mr. Henry Burgess, one of the best-informed practical men in England. The rise and progress of the growth and manufacture of wool is associated with the advancement of society in Europe, and even in some parts of Asia, but especially in this kingdom; and the welfare of the Australian settlements has been so materially forwarded by it, that the following summary of its history, though almost too lengthy for these pages, may not be considered wholly inappropriate:—

“It is recorded of Phemius, the step-father of Homer, that he taught letters and music to the youth of Smyrna, and received wool in exchange for his instruction. The plain of Damascus supplied large quantities of wool for the manufactures of Tyre

in the palmy days of Phœnician enterprise, and when purple and fine linen ranked among the choicest articles of commerce. Colchis in Thrace, Laodicea in Phrygia, also produced wools of superior quality, and a portion of the latter was naturally of a fine jet black. Ireland, at one time, had numerous flocks of a similar breed. But Miletus, the Lord Western of his time, is stated to have produced in Caria, wool preferred to all others. Pliny speaks of wool being brought from a great city north of the Ganges, probably in Thibet, or Nepal, by way of Bactria, also to supply the manufactures of Western Asia; it was from these sources of supply, the material was obtained for the manufacture of those costly fabrics, which, when dyed with Tyrian purple, conferred such celebrity on the commerce of Phœnicia. After the decline of the Tyrian manufacture, it appears to have planted itself in Italy; Padua and Modena having, in their turn, become celebrated for their woollen fabrics.

“Spain, antecedent to, or about the commencement of, the Christian era, had also attained celebrity for its woollen manufactures, and at that time exported largely. Soon after Cæsar's time Britain produced wool in great abundance, and in Anno Domini 314, great fairs for wool were held several times in the year at York, London, and Colchester. It was about the middle of the tenth century when the woollen manufacture established itself on an extensive scale in Flanders, and from that time to the commencement of the twelfth century, the bulk of the wool produced in Britain appears to have been exported to the former country, and to such an extent, that it became proverbial that all the nations in the world were clothed with English wool made into cloth by the Flemings. An extensive inundation of the Low Countries about the end of the eleventh century, having caused a number of Flemings to seek refuge in England, there they met with a favourable reception, and gave the first characteristic impetus to the woollen manufacture therein; so that by 1189 it had become extended over the greater part of England. At this date guilds of weavers had been established in London, Huntingdon, Lincoln, Nottingham, Winchester, Oxford, and York, all paying fines to the king for their corporate privileges, and licences were also granted to dealers in several large towns. In the thirty-first of Henry II. (1185) the weavers of London obtained a confirmation of their charter, in which it was directed, that if any weaver mixed Spanish wool with English, in making cloth, the chief magistrate should burn it. In 1216 it is stated that the breed of sheep had greatly increased, and that, although the exportation of wool was still very considerable, the manufacture of cloth had also progressively increased, and that large quantities of cloth in the grey unfinished or undressed state, were also exported; and in which state a good deal of cloth was also worn in England; it appearing that up to this time very little progress had been made in the art of dyeing, although we find the duties on wool amounting to £593 12s. 1d. in a single year. In 1261 the barons enacted “that the wool of England should be manufactured at home, instead of being sold to foreigners, and that all persons should wear woollen cloth made within the kingdom, and avoid every superfluous extravagance of dress.” How far this restrictive and sumptuary enactment was carried into effect, does not distinctly appear, but we find that in 1266, new regulations were enacted in respect to levying of duties on wool exported. In

1298 the king, by letter, directed that all wool and wool-fells of the counties of Bedford, Buckingham, Derby, Cambridge, Huntingdon, Warwick, Leicester, Rutland, and Norfolk, should be shipped at Lynn; Newcastle, Hull, Ipswich, Southampton, Bristol, and London, being also other ports for the exportation of the same. It was in 1327 the king granted a patent in favour of the manufacturers of worsted stuffs in Norfolk; and in 1331, great inducements were held out to Flemish manufacturers to immigrate into England. In 1337 an act was passed, making it felony to carry any wool out of the kingdom, and at the same time, all persons, except the king and his family, were interdicted from wearing any cloth of foreign manufacture, on pain of arbitrary punishment; this enactment, however, appears to have been preparatory to the king (Edward III.) constituting himself the Mehemet Ali of that day, for we find him, immediately after, contracting for 20,000 sacks of wool, and for some years subsequent, the great wool-stapler of England, entering into and concluding negotiations with Flanders and other foreign parts, for the supply of wool, and for the year 1354, we find the following very circumstantial account of the exports and imports, viz. :-

is stated to have been much less than usual, the customs on it amounted to £160,000, over and above tonnage, poundage, aulnage, peltage, &c. In the same year, Guildford, in Surrey, is spoken of as the centre of an extensive manufacture, where the cloths had fallen into disrepute, consequent on the defective fulling and undue stretching. In 1399, cloths of certain descriptions, and below a certain value, should be exempt for three years from the charges of sealing and duty, for the ease of the poor.

"In 1421 the following statement was presented to the king, as the proceeds of revenue for the year ending Michaelmas, 1420, viz.—

Customs on wool	£3,967	1	2
Subsidy on ditto	26,035	18	8
Small customs	2,436	9	1½
12 pennies in the £ on value of goods } exported, £164,750 15s. 10d. }	8,237	10	9½
<hr/>			
Casual revenue	£40,676	19	9¼
	15,066	11	1
<hr/>			
Total revenue	£55,743	10	10¾

Exports.

Quantity.	Value.	Customs.
31,651½ sacks of wool, at £6	£180,909	} £81,624
3,036 cwt. (120 lbs.) of do. £2	6,072	
65 wool-fells, 21s. 8d. . . .	1	} 7
hides	89	
4,774½ pieces of cloth	9,549	} 216
8,061½ " of worsted stuffs	6,718	
Total Exports	£212,338	£81,847

Imports.

Quantity.	Value.	Customs.
1,831 pieces of fine cloth . . .	£10,986	£98
397½ cwt. of wax	795	20
1,829½ tuns of wine	3,659	183
Linens, mercery, grocery . . .	22,944	286
Total Imports	£38,384	£587

"In 1429 it was ordained that, for the profit and wealth of England, the prices of wool and wool-fells should be raised, and that they should be sold to the merchants of Genoa, Venice, Tuscany, Lombardy, Florence, and Catalonia, for gold and silver only. In 1449, English cloths were prohibited in Brabant, Holland, and Zealand, which being judged contrary to the existing treaty, and found very distressing to the men weavers, fullers, and dyers, and the women websters, carders, and spinners, and all others concerned in the trade, it was resolved in parliament, that if the Duke of Burgundy did not repeal the injurious ordinance, no merchandise of the growth or manufacture of his dominions should be admitted in England. In 1463, the parliament, considering that the wool of England was the principal commodity of the kingdom, and desirous of promoting the industry of the people and the prosperity of the towns, prohibited foreigners from buying or shipping any wool, wool-fells, morlings, or shorlings, from England or Wales, except from the four northern counties, and the districts of Alverton and Richmond, in Yorkshire, and thence they were allowed to be shipped from the port of Newcastle only. In 1497, it is stated that woollen cloth was one of the greatest commodities of England, and that Henry VII. concluded a commercial treaty with the Archduke Philip, wherein it was stipulated that the woollen goods of England should be received in the Netherlands without paying duty; yet such appears at all times to have been the caprice and uncertainty resulting from the manufacturing mania, that, in 1530, we find foreign merchants, as well as English manufacturers, withdrawing from England, inasmuch that the woollen manufactures very much declined, and foreign cloth was sold cheaper than the English, by which means much land was turned into sheep-walks for supplying the Netherlands with wool.

"In 1534, an act of parliament (25 Hen. VIII., c. 13) represents the practice of engrossing farms and diverting land from tillage to the support of vast numbers of sheep, as an evil lately sprung up, and that some have 24,000, some 20,000, some 10,000, to 5,000 sheep, whereby a good sheep, that used to be sold for 2s. 4d. to 3s. at most, is now

"By 1357 the king appears to have become tired of trading, for in this year, English as well as foreign merchants, were permitted to export wool and wool-fells, to any country in amity with the king. About this time the woollen manufactures of Ireland had acquired great celebrity. The Catalonians, at this period, appear to have enjoyed the highest repute in Europe for their fine woollen fabrics, but were, at the same time, buyers of the stuffs called *serges*, manufactured by the Irish, for re-sale in Florence, where it is stated the luxury of dress was carried to the greatest height. A passion for what is termed luxury in dress, appears at this period to have become general over a great part of Europe; for we find that, in 1363, a sumptuary law was passed by the parliament of England, prescribing the kinds of cloth to be worn by the different classes of society. From 1363 to the close of the century, various regulations were enacted respecting the fulling, and the sale and exportation of both wool and cloths; and, although in the year 1391, the exportation of wool

sold for 6s., or 5s., or 4s., at least; and a stone of wool, which used to be sold for 1s. 6d. or 1s. 8d., is now sold for 4s. or 3s. 4d., at least, &c., which things tend to the decay of hospitality, the diminishing of the people, and to the let of cloth-making, whereby many poor people have been accustomed to be set on work; for remedy it was, in substance, enacted, that none shall keep above 2,400 sheep (exclusive of lambs), and no man should hold above two farms.

"In 1537, or thereabout, it is stated that the woollen manufacture was introduced at Halifax, in Yorkshire, and that, besides the largeness of its parish, which contained eleven chapels and about 12,000 people, nothing is so admirable as the industry of the inhabitants, who, notwithstanding an unprofitably barren soil, have so flourished by the cloth trade, that they are become very rich, and have gained a reputation for this above their neighbours.

"In 1550, sixty vessels cleared from Southampton with wool for the Netherlands, so great (it is observed) was the demand for the woollen manufactures of that country, even when England had made a considerable progress in the same manufacture.

"In 1552, the English company of merchant-adventurers, who had had for the forty-five preceding years the sole command of the British commerce, had reduced the price of English wool to 1s. 6d. per stone; in the preceding year they had exported 44,000 woollen cloths of all sorts, while all the English merchants together had, in the same year, exported only 1,100 cloths.

"In 1560, the commerce between England and the Netherlands is represented to have attained a great height, the export of draperies from England amounting to 200,000 pieces, and the aggregate export to £2,400,000, to the great benefit, it is said, of both countries, neither of which could possibly (without the greatest damage) dispense with, of which the merchants on both sides were so sensible that they fell into a way of insuring their merchandise from losses at sea by a joint contribution. *This then appears the period of commencing the practice of maritime insurance.*

"In 1567 the city of Norwich is spoken of as having recovered from the desolating effects of Ket's rebellion in 1540, and that its manufacture of fine and light stuffs had become famous all over Europe, and that the Flemings, about this time, introduced into that part of the country a taste for floriculture; this is also the period when Colchester, in Essex, was the centre of extensive manufactures of baizes, serges, and other light worsted fabrics.

"In 1582, the Hanseatic League (the German League of the present day) complained to the Diet of the empire that by the high duty laid on woollen cloth in England it had become twice or thrice as dear as it had before been, whereby the vast increase of England's wealth, 200,000 cloths being yearly imported from thence. The only remedy was to banish the English merchant-adventurers out of the empire, and absolutely to prohibit all manner of English woollen manufactures. The complaints of the League prevailed with the Diet, who passed sentence against the English merchants, and absolutely prohibited all English woollen goods. Notwithstanding the prohibition by the German Diet, it appears that in 1603 a duty of £1 13s. 4d. was levied on every sack of wool exported by aliens, and the same for every 240 wool-fells, and by proclamation the exportation was afterwards prohibited, which indeed, it is said, it was

high time to do, the English manufacture of it being now too considerable, and so much sent into foreign parts as to employ or work up all, or nearly all, our own wool at home.

"In 1608 it is stated that the English were but little skilled in the arts of dying and dressing their own woollen cloths, and therefore usually sent them white into Holland, where they were dyed and dressed, and then sent back to England for sale. It is surprising that those who made the finest cloths in the world could not finish them, but the fact was really so. Alderman Cockayne, and some other merchants, reflecting on the great profit thereby made by the Hollanders, proposed to the king to undertake the dying and dressing of cloths at home, to the great profit of the public and his Majesty; whereupon the alderman obtained an exclusive patent for it, and the king was to have the monopoly of the sale of such dyed cloths. The king thereupon issued a proclamation prohibiting any white cloths to be sent beyond sea, and seized the charter of the Company of Merchant Adventurers, which empowered them to export white cloths. In retaliation the Hollanders and Germans prohibited the importation of all English-dyed cloths; from this period the manufacture appears to have struggled with alternations of success and the reverse for a great length of time.

"In 1630, King Charles is stated to have confirmed his father's proclamation against the exportation of wool, wool fells, and woollen yarn, upon pain of confiscation, &c., for the encouragement of the woollen manufactures, and ordering that for the better utterance of cloth within the kingdom all black cloths and mourning stuffs at funerals should be only of the wools of the kingdom, and the false dying of cloths and stuffs being a great hindrance to their vent, none should therein use any logwood or blockwood. The prohibition of the exportation of wool was further confirmed by parliament in 1647; and in 1660 it was further enacted that no live sheep, wool, or woollen yarn should be exported on pain of forfeiture thereof, and of the ships or vessels attempting to carry the same, and also a penalty of 20s. for every sheep, and 3s. for every lb. of wool, and three months' imprisonment for the master of such sheep, 12 Car. II., c. 22. In 1662 several additional enactments were passed more rigidly prohibiting the exportation of wool. In 1666, 18 Car. II., c. 4, it was enacted, for the encouragement of the woollen manufactures of England, that no person should be buried in any shirt, shift, or sheet, made of, or mingled with, flax, hemp, silk, hair, gold, or silver, or other than what shall be made of wool only, upon forfeiture of £5 to the poor of the parish, towards a stock or work-house for their employment. In the following year, 1667, great improvements in dyeing and finishing of the cloth took place in consequence of the immigration of some workmen from Flanders. In 1685 an influx of refugees from France brought with them considerable improvements in the manufacture of fine worsted stuffs. In 1688-9 great complaints prevailed against the rivalry of the woollen manufactures of Ireland; at the close of the century the total exportation of woollens from England was as follows, of which two-thirds were exported from the port of London, viz:—

1698	£3,120,615
1699	2,932,292
1700	2,989,163
1701	3,128,365

and at the three following periods the value of all

woollen manufactures and worsted stuffs exported was, viz. :—

Period.	Value in £	Period	Value in £.	Period.	Value in £.
1718	2,673,696	1738	4,168,643	1772	4,433,783
1719	2,730,297	1739	3,218,273	1773	3,875,929
1720	3,059,049	1740	3,056,720	1774	4,333,583
1721	2,903,310	1741	3,669,734	1775	4,220,173
1722	3,384,842	1742	3,358,787	1776	3,868,053
1723	2,920,601	1743	3,541,558		

and for the ten years, 1790—1799, the amount annually exported averaged £5,392,744. In an appendix to the evidence taken by a committee of the house of lords in 1828, is a statement showing the proportion of short and long wool grown in each county of England, which represents the quantity in 1800 to have been 325,000 packs, and in 1828, 384,500 packs of 240 lbs. each = 92,260,000 lbs. : this is for England only, and to which Wales and Scotland are to be added.

The machinery of England and Scotland is capable of working up an almost indefinite quantity of wool; its manufacture is, I believe, one of the most steadily profitable branches of our national industry.

The production of the raw material, also, is found remunerative in England, Spain, Saxony, and other countries. Capital invested in an Australian sheep run is considered to return at present about twenty per cent. The most highly-prized to breed from are Lord Western's, the Saxony, and pure Merinos. Saxony rams, recently imported at Melbourne, sold privately for thirty guineas each. October and November are the shearing months; and soon after that time ships begin to load for England. The wool from Victoria is annually improving.

The average weight of a Port Phillip sheep is 60 lbs.; each sheep is computed to yield a clip of 2½ lbs. of wool (or 3 lbs. on rich pasturage), and the average weight of tallow obtained from each animal by boiling down, is 26 lbs. The price in February, 1849, at Melbourne, was 4s. to 5s. per sheep. Rough serviceable horses sold at the same period at prices varying from £4 to £14 sterling each; horned cattle at 25s. to 30s. per head.

The large Leicestershire breed of sheep in Australia weigh about 140 lbs. each, and yield 6 to 7 lbs. of wool. The Saxon breed yield a much finer wool, and have a small carcase. Dr. Thompson had, however, a pet Saxon wether, which weighed 150 lbs, and whose fleece weighed 10½ lbs. In general the yield of the fleece at Port Phillip is 4 lbs. from a sheep at maturity (five years), but every subsequent year the weight of the fleece decreases. Much de-

pends on the state of the pasture; if the soil be too rich, or too sandy, the teeth of the sheep wear away quickly, and if not consigned to the butcher they would perish of inanition. The coarse, hardy Leicester sheep is not so liable to the catarrh, or foot rot, as the more pure-blooded Saxon or Merino.

LIVE STOCK were first imported into the province, as previously stated, in 1836. Their numbers have rapidly increased since that period, as will be seen from the following statistical return:—

Year.	Horses.	Horned Cattle.	Sheep.	Swine.
1840	2,372	50,837	782,283	
1841				
1842				
1843	4,605	100,792	140,433	3,041
1844	6,278	167,156	1,602,798	—
1845	7,076	187,873	1,860,912	—
1846	9,289	231,602	2,449,527	3,986
1847	11,400	290,439	2,996,992	5,867
1848				
1849	16,495	386,688	5,130,277	5,659
1850	—	—	—	—

Note.—There are no returns previous to the year 1840.

The "boiling down" system has been adopted in this province from necessity, as well as in New South Wales, though to a much less extent. The live stock slaughtered, and its produce, is thus shown:—

Year.	Boiling down Establishments.	Slaughtered.		Tallow produced.	Hogs slaughtered.	Lard produced.
		Sheep.	Horned Cattle.			
1845	4	10,950	2,784	Cwt. 4,344	29	lbs. 240
1846	3	7,007	982	1,994	—	—
1847	4	52,437	2,647	13,205	6	488
1848	7	120,691	5,545	27,725	2	200
1849	—	—	—	—	—	—
1850	—	—	—	—	—	—
Total						

In 1848, the live stock slaughtered in Melbourne, consisted of, sheep 37,787; horned cattle 6,667; pigs 1,475.

The average weight of tallow obtained from a sheep, is 26 lbs.

The expense of converting sheep into tallow, sorting and packing the skin, wool, &c., is about one shilling a sheep, which may be defrayed by boiling the pelt, hoofs, horns, sinews, &c., into glue, of which each sheep will yield about four pounds weight. With regard to cattle, the *intrinsic* value of an ordinary four-year-old beast consists of 80 lbs. of tallow, at 32s. per cwt.; hide, horns, glue, bones, refuse, soup, and meat, 14s. 6d. = 40s.

There is a very extensive "boiling down" establishment, near Melbourne, belonging to Messrs. Watson and Wright, who have not only large steam boilers for obtaining the tallow from several animals at once, but also kilns for drying hams, manufactories for curing meat, a tannery, cooperage, &c., all giving employment to a number of people. There are also similar establishments belonging to Messrs. Brodie and Cruikshank, and other enterprising individuals, who have established candle works and soap manufactories.

The Australian preserved beef, put up in air-tight canisters, is excellent, and well deserving the attention of the victualling department of her Majesty's navy, and of the owners of merchant ships.

I have recently partaken of a round of this meat, put up two years before in New South Wales, which was fit for any table in the kingdom; the flavour was good, and the nutritious qualities very great. The beef is of easy digestion, and would be well adapted for aged and young persons in England.

Mr. R. C. Dangar, of Billiter Street, London, has sent out to the colony a preserving apparatus, and properly instructed persons to prepare the meat. He has now obviated the defects that hitherto existed in the Australian meats, which rendered some of them unsaleable in England, and has introduced a valuable article of commerce. The quality of that now imported is at least equal, by some persons it is even deemed superior, to any of the meats preserved in England.

The admiralty require annually five hundred tons of preserved boiled beef for the crews of her Majesty's ships. A large part of this is, I believe, supplied from Wallachia and Moldavia; but it is to be hoped that encouragement will be given by government to the production of our own colonies. The use of this fresh meat in the British mercantile marine, once or twice a week, would be beneficial to the seaman and economical to the ship-owner; good salt beef for sailors now costs from 3*d.* to 4*d.* per lb., and each man is allowed one pound and a-half a day. Of this about fifty per cent. is lost in boiling and by weight of bone. One pound of Australian cooked fresh meat, *without* bone, would not cost more than the pound and-a-half of salt meat, and be far more nutritious and healthy for the men.

Several ship-masters have commenced the royal navy practice, and are using the fresh meat; and the certificates of the commanders of these vessels prove its capability of standing the test of any voyage, even when subjected to the trying temperature of the hold of a ship in the tropics. I used, while in China, some Australian beef gelatine, for the preparation of soup, and found it wholesome and palatable. In a few years, it is probable that the export of cured meats will be a large and profitable branch of business; and, as horned cattle are increasing with extraordinary rapidity, the supply may be said to be almost incalculable.

The cultivation of the grape has been successfully commenced in various parts of the colony, and promises well.

Year.	Acres of Vineyards.	Wine Made.	Brandy Made.
		Gallons.	Gallons.
1847	78	2,600	—
1848	101	1,300	30
1849	108	6,306	100
1850	—	—	—

The produce of the Swiss vineyards at Geelong is 1,000 gallons of wine per acre. Mr. Andrew Lang, justice of the peace of Dunmore, Hunter's River, had 1,200 gallons per acre. In both instances the beverage had the character of the Rhenish and Moselle wines. The tract of volcanic country to the northward of Melbourne is peculiarly adapted, by soil and climate, for the cultivation of the vine; and a large German immigration is expected, for the development of this useful product.

The common flax plant (*linum usitatissimum*) is indigenous to Australia. Towards the Glenelg river it covers a large tract of marshy land. On the Lower Darling river it is found in great abundance, and is used by the natives for cord or line-nets. The south-west part of Victoria province, and the north-east districts of New South Wales, would seem well adapted for the culture of flax, which is a thirsty plant, deriving nutriment from the air, rather than from the soil. It affords a very profitable crop, which, if properly dressed, always commands a market in Europe. The raw staples of flax, hemp, cotton, and silk, will doubtless be included, in course of time, among the valuable exports of Australia.

The *red gum*, or mahogany of the colonists, is now being exported to England: the texture is close and fine. Recently, a

vessel of 300 tons burden—the *Jane Cain*, was launched from the Melbourne wharf: she was elaborately finished; and her cabin exhibited specimens of nearly every kind of wood produced in the colony. The Cape Otway, and other neighbourhoods, present a great abundance of rare and useful timbers.

The fisheries of Port Phillip, as also those of the other Australian colonies, are as yet undeveloped. A fine fish, called "cod," occasionally weighing upwards of ninety pounds, is numerous, and easily angled, in the rivers in the northern portion of the province. These fish are stated to be equal in flavour, though not in firmness, to their namesakes of Newfoundland. In February and March, large "schools" of herring frequent the coast. The real "Blackwall white-bait" may be taken in quantities in the bay of Port Phillip; also the schnapper, or bream, butter-fish, flatheads, lobster, or sea crayfish, and large shrimps.

Whales frequent the bays and harbours on the coast; Portland bay has been a favourite resort for the cetacæ during the calving season, and there is a lucrative fishery.*

The progress of the province is seen in the following tabular statement:—

Years.	Imports.	Exports.	Total.	Custom duties.	Vessels outwards.	Wool exported.
					Tons.	lbs.
1837	£108,939	£12,180	£121,119	£2,979	13,424	175,081
1838	71,061	20,589	91,650	6,735	11,679	320,393
1839	204,722	77,684	282,406	11,476	20,352	615,605
1840	392,026	154,650	546,676	27,306	34,477	1,704,861
1841	217,764	157,069	374,833	46,093	34,156	2,752,340
1842	194,510	197,912	392,422	54,973	34,146	3,331,395
1843	120,765	221,639	341,314	41,419	34,215	4,204,979
1844	158,863	242,801	401,664	36,451	—	4,828,735
1845	205,390	342,624	548,014	42,536	—	5,415,000
1846	315,571	425,201	940,772	37,852	—	6,406,950
1847	437,696	688,511	1,106,407	38,288	48,643	10,210,038
1848	373,676	675,359	1,049,035	52,270	55,094	10,524,663
1849						12,697,440
1850						

For continuation see Supplement.

Note.—From 1841 to 1845 the returns are for the years ending 10th October, which represent the annual progress of the colony better than the year ending 31st December, as that is the middle of the wool shipping season. The extensive transactions with Sydney are not recorded, the province having been a district of New South Wales.

* Some whale fishers at Peterhead, in Scotland, have disputed the accuracy of my statements under Newfoundland, as to the proportion of oil which each foot of whalebone generally represents. If the sample blade of whalebone, *i. e.* the largest of the laminæ in the series, weigh seven pounds, the whalebone will weigh about a ton. The oil yielded generally, according to the measurement of the different lengths of whalebone is stated by Scoresby to be as follows:—Whalebone, 1 foot = 1½ tons of oil; 2 = 2¼; 3 = 2¾; 4 = 3½; 5 = 4; 6 = 5; 7 = 6½; 8 = 8; 9 = 11; 10 = 13½; 11 = 17; 12 = 21

DIV. II.

The progress of the export trade is thus shewn:—

Year.	United Kingdom.	British Possessions.	Total Value.	Total Tonnage Outwards.
1837	—	£12,180	£12,180	13,424
1838	—	20,589	20,589	11,679
1839	£26,654	51,030	77,684	20,352
1840	60,155	93,808	153,963	34,477
1841	94,431	81,704	176,135	34,156
1842	200,332	36,790	237,122	34,146
1843	266,650	41,316	307,966	34,215
1844	202,850	51,157	256,847	—
1845	576,551	86,946	463,957	—
1846	323,881	101,320	425,201	—
1847	566,417	101,494	688,511	48,643
1848	581,355	93,739	675,359	55,094

The following is the number and tonnage of vessels, inwards and outwards, engaged in the Geelong trade in the year ending October 10, 1849:—[1851-2 in Supplement.]

Vessels.	Inwards.		Outwards.	
	No.	Tons.	No.	Tons.
Foreign . . .	174	12,659	76	11,347
Coasters . . .	149	7,534	141	7,848
Total . . .	223	20,193	217	19,195

Imports, £36,195; exports, £255,087; exclusive of goods removed coastwise; revenue collected, £9,256. Produce exported—wool, 5,684,903 bales; sheep, 9,976; horned cattle, 524; beef, 112 tons; hides, 637; horses, 2,400; tallow, 373 tons.

Among the imports, in 1848, were the following items:—Apparel, 1,607 kegs; gunpowder, 18,220 lbs.; shot, 22 kegs; beer and ale, 289,381 gallons; bricks (Bath and fire), 9,000; cocoa nuts, 2,000; coffee and chocolate, 505 cwt.; cottons, 527 bales; earthenware and china, 864 packages; glass, 1,017 packages; haberdashery, 1,329 packages; hardware and ironmongery, 6,420 packages; hats, caps, and bonnets, 168 packages; hosiery and gloves, 541 packages; instruments (musical), 28 packages; iron and steel, 872 tons; jewellery, 6 cases; lead, 29 tons; leather (unmanufactured), 72 packages; boots and shoes, 305 packages; machinery, 505 packages; nails, 898 kegs; malt, 465 bushels; oil (linseed), 626 gallons; oilcloth, 11 cases; oilman's stores, 3,615 packages; pepper and spices, 36,648 lbs.; perfumery, 4 cases; pipes (tobacco), 151 boxes; pitch, tar, and rosin, 654 barrels; plants and seeds, 241 packages; plate and plated ware, 4 packages; saddlery and harness, 244 packages; silks, 31 cases; slates, 19,174 number; soap, 232 boxes;

brandy, 50,345 gallons; rum, 52,552 gallons; gin, 15,769 gallons; whisky, 5,529 gallons; liqueurs, 53 gallons; stationery and books, 551 packages; sugar (refined), 992' cwt.; ditto (raw), 1,940 tons; tea, 302,840 lbs.; tin and tin-ware, 177 boxes; tobacco, cigars, and snuff, 179,506 lbs.; toys and turnery, 85 packages; turpentine and varnish, 70 cans; vinegar, 6,178 gallons; watches and clocks, 75 packages; wine, 60,476 gallons; wooden ware, 1,008 packages; woollens, 265 bales; &c.

Excepting tea, sugar, spices, and a few other articles, the whole of the above-mentioned goods, and others not enumerated, were from England, and amounted in real value to about £300,000. The exports for the present year to the Port Phillip district will amount, it is estimated, to half a million sterling; and to the Sydney district, about a million and-a-half sterling. Thus we export to a colony which is but the creation of yesterday, with a population of 250,000 inhabitants, an amount of goods nearly equal to one-half the total annual value of all our exports to France, with its thirty-six or forty million of inhabitants. At the close of this work, I hope to prepare a clear statement of the British trade with our maritime possessions, compared with that carried on with foreign countries, in order that a just estimate may be formed of the relative importance of our colonial and foreign trades; and lest the assertion made in Parliament, during the discussion on the Australian government bill, that the cost of our colonies to the home exchequer was equal to the trade we carried on with them, should be believed, it may here be stated that New South Wales and Port Phillip, as well as other colonies, *defray every shilling of their own expenditure*; and the troops stationed there might as well be withdrawn, for any protection they afford to the colonists. Excepting, therefore, the pay of these soldiers, New South Wales and Port Phillip not only meet their own charges, but remit yearly a considerable sum to her Majesty's treasury in London, to provide for the conveyance of the pauper labouring poor of the United Kingdom, who seek remunerative labour in that remote portion of the British empire.

The ignorance of the mere geographical position of our colonies is not restricted to parliamentary documents, where, among other errors, *Berbice* is designated as one of the islands of the *Bahamas*. Shippers

of goods should pay special attention to the geography of the ports to which they consign goods. For instance, two vessels sail from London as advertised for Port Phillip; but there are two harbours within this immense port; one called *Hobson's Bay*, which is the haven of the city of Melbourne; and the other *Geelong*, which is nearly fifty miles distant. Goods put on board a vessel bound to Hobson's Bay, Melbourne, but consigned to Geelong, will be exposed to risk, considerable delay, and additional expense, in their transit to their proper destination. Bills of lading should therefore be made out either for Hobson's Bay, Melbourne, or for Geelong, and shipped accordingly.

The custom duties levied at Port Phillip are of the same amount as those enacted for Sydney, New South Wales. Fifteen shillings per foot is charged on all vessels inward or outward bound as pilotage dues, besides harbour dues. One shilling per bale is charged for shipment of wool from Melbourne to Hobson's Bay (the shipping port), and 5s. per ton for general goods.

The rates of exchange are thus stated for January, 1839:—Bills on London at thirty days' sight purchased at one per cent. discount, one-half per cent. for every additional thirty days; on Van Diemen's Land at sight purchased at two per cent. discount. Drafts on London, at thirty days' sight, under £100, issued at three per cent. premium; on Sydney, at sight, issued at one per cent. premium; on bills having a currency of not more than 100 days, eight per cent. per annum; on bills beyond that currency, ten per cent. per annum.

The revenue and expenditure has been—

Years.	Revenue.		Total.	Expenditure.
	General.	Crown or Land.		
1837	£2,979	£3,712	£6,691	£2,164
1838	6,734	37,194	43,928	6,723
1839	11,475	60,869	72,364	27,854
1840	36,569	218,853	255,422	93,195
1841	81,673	78,417	159,000	167,339
1842	84,566	2,729	87,295	129,048
1843	67,066	10,508	77,574	—
1844	56,799	11,021	67,810	—
1845	66,531	23,687	90,118	51,725
1846	60,623	35,996	96,619	51,559
1847	66,892	68,049	134,942	65,758
1848	84,868	59,479	144,347	137,500

According to the *Melbourne Argus* of 18th May, 1847, the following was the financial state of the Port Phillip province for 1846:—

MORTGAGES ON LAND AND LIVE STOCK IN VICTORIA PROVINCE. 283

Receipts.—General revenue, £60,623; crown land revenue, £35,537; droits of the crown, £459 = £96,619.

Expenditure.—From general revenue, £34,695; schedule A, £5,200; schedule B, £1,769; schedule C, £3,325 = £50,768. Surplus revenue for 1846, £45,850.

The general and the land revenue is again increasing: for the quarter ending September, 1848, the general revenue was £18,180; ditto, 1849, £21,030. The land revenue for

the same period was, in 1848, £20,142; in 1849, £33,410. Total, 1848, £38,222; 1849, £54,441. The returns on this head are discrepant, as some include only the land sales, and others the depasturing licences.

The extent of mortgages on land, and of advances on wool and on live stock, are shown in the following statements, which are, in form, similar to the returns given under New South Wales:—

Number and Amount of Mortgages on Land, registered at Port Phillip, from the year 1837 to 1848 inclusive.

Year.	Mortgages on Town Lands.		Mortgages on Country Lands.		Mortgages on Town and Country Lands.		Totals.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
1837	—	—	—	—	—	—	—	—
1838	16	£17,260	—	—	—	—	16	£17,260
1839	89	44,868	21	£32,595	—	—	110	77,463
1840	60	73,176	19	53,768	3	£7,500	82	134,445
1841	51	42,858	40	39,765	8	25,850	99	108,474
1842	95	56,090	57	40,301	10	16,870	162	113,261
1843	69	27,238	47	48,322	18	194,853	134	270,413
1844	45	17,831	20	29,317	3	1,510	68	48,658
1845	37	12,262	25	24,461	1	10,000	63	46,723
1846	45	14,702	25	21,034	—	—	70	35,736
1847	67	19,544	30	23,487	—	—	97	43,032
1848	97	33,433	40	36,395	4	1,900	141	71,728

Amount of preferable liens on wool, and of mortgages on live stock, in the colony of New South Wales, registered at Port Phillip,

since the passing of the act of Council, 7th Victoria, No. 3,—15th September, 1843, to 31st December, 1848, inclusive.

Year.	Preferable Liens on Wool.			Mortgages on Live Stock.				
	Liens.	Sheep.	Liens.	Mortgages.	Sheep.	Cattle.	Horses.	Lent.
	Number	No.	Amount.	No.	No.	No.	No.	Amount.
1843	9	37,910	£4,959	28	57,338	4,240	310	£24,131
1844	66	275,168	23,022	117	345,159	19,655	629	129,008
1845	37	168,793	11,784	71	149,536	8,175	136	44,383
1846	22	133,375	11,159	85	251,402	12,506	227	100,071
1847	43	284,202	33,790	125	539,924	22,252	480	135,907
1848	102	819,823	62,532	146	600,517	34,469	510	129,808

The liens are renewed every year, by advances on the *ensuing* clip of wool, and the same sheep may consequently be included in successive years. The mortgages of real estate are renewed every three years, on terms of mutual arrangement.

grants who arrived at Port Phillip during the year 1848, are shewn in the accompanying returns; but as the immigrants arriving in the Port Phillip district may readily pass into the New South Wales district, and *vice versa*, the return is given for both divisions of the province.

The number and description of the immi-

Return of the Assisted Immigration to Sydney and Port Phillip, during the year 1848.

—	SYDNEY.								PORT PHILLIP.							
	—		Above 14 years.		Under 14 years.		Total	Stat. Adult	—		Above 14 years.		Under 14 years.		Total	Grand Total
	Male	Fem.	Male	Fem.	Male	Fem.			Male	Fem.	Male	Fem.	Male	Fem.		
Births on the passage.	42	44	—	—	—	—	86	—	36	30	—	—	—	—	66	152
Deaths on the passage.	—	—	2	7	26	28	63	—	—	—	7	13	47	55	122	185
Number landed.	—	—	1514	1613	671	578	4376	3657	—	—	1227	1306	513	463	3509	7885

The extensive immigration caused by the recent gold discoveries is shown in the Supplement.

284 EMIGRANTS FROM ENGLAND, WALES, AND SCOTLAND TO N. S.W.

Return showing the proportions in which the Assisted Immigrants, who have arrived in the Colony during the year 1848, have been taken from the several counties of Great Britain.

England.	Landed in Sydney District.	Landed in Port Phillip District.	Wales and Scotland.	Landed in Sydney District.	Landed in Port Phillip District.
ENGLAND.			WALES.		
Northern counties:—			Carnarvonshire — —		
Northumberland	6	14	Denbighshire	—	—
Cumberland	3	4	Flintshire	2	—
Westmoreland	2	2	Merionethshire	1	—
Durham	16	5	Cardiganshire	—	—
Yorkshire	149	136	Montgomeryshire	2	3
Lancashire	88	64	Pembrokeshire	1	3
Isle of Man	4	—	Carmarthenshire	7	—
Total	268	225	Brecknockshire	1	—
Southern counties:—			Glamorganshire	6	3
Kent	102	26	Anglesea	—	—
Sussex	46	10	Total	20	9
Surrey	66	23	SCOTLAND.		
Hampshire	47	6	Northern counties:—		
Wight I.	5	54	Caithness	3	5
Berkshire	48	13	Sutherland	—	24
Dorsetshire	32	81	Ross-shire	35	86
Wiltshire	192	210	Cromarty	—	—
Somersetshire	19	85	Nairn	—	—
Devonshire	177	285	Inverness-shire	50	152
Cornwall	42	—	Moray or Elgin	6	5
Guernsey I	3	3	Banff	4	5
Jersey I.	3	—	Aberdeen	14	17
Alderney	1	—	Kincardine	1	—
Total	783	796	Forfarshire	12	15
Midland counties:—			Fifeshire	32	32
Cheshire	8	—	Kinross	—	—
Derbyshire	27	2	Clackmannan	9	2
Nottinghamshire	160	34	Perthshire	29	36
Staffordshire	29	4	Orkney or Shetland Isles	6	3
Warwickshire	25	2	Isle of Skye	—	1
Worcestershire	28	—	Total	201	383
Leicestershire	62	9	Southern counties:—		
Rutlandshire	1	1	Edinburgh	19	28
Northamptonshire	99	42	Haddington	4	—
Buckinghamshire	215	124	Berwickshire	—	20
Oxfordshire	66	171	Roxburghshire	9	15
Gloucestershire	76	62	Selkirkshire	—	4
Monmouthshire	—	5	Peebles	1	—
Herefordshire	15	16	Lanarkshire	65	25
Shropshire	9	1	Dumfriesshire	14	11
Total	829	473	Galloway	—	2
Eastern counties:—			Ayrshire	48	94
Lincolnshire	55	40	Dumbarton	3	11
Norfolk	62	116	Argyleshire	97	59
Huntingdonshire	31	13	Renfrewshire	162	138
Cambridgeshire	41	83	Stirling	21	13
Suffolk	85	87	Linlithgowshire	—	14
Bedfordshire	59	56	Bute	2	—
Hertfordshire	37	11	Wigtonshire	9	5
Essex	30	10	East Lothian	3	2
Middlesex	200	64	Mid Lothian	1	—
Total	600	480	Total	458	441
Grand Total	2,480	1,974	Grand Total	679	833

Note—The counties named are those of which the emigrants were natives.

IRISH PROVINCES FROM WHICH EMIGRANTS ARRIVED.

Return showing the proportions in which the Assisted Immigrants, who have arrived in the colony during the year 1848, have been taken from the several counties of Ireland.

Provinces.	Landed in Sydney District.	Landed in Port Phillip District.	Provinces.	Landed in Sydney District.	Landed in Port Phillip District.
IRELAND.			Ulster:—		
Leinster:—			Donegal	8	58
Longford	3	3	Londonderry	38	49
Westmeath	57	30	Antrim	127	20
Eastmeath	—	—	Fermanagh	5	12
Louth	8	1	Tyrone	62	10
King's County	62	11	Down	43	2
Kildare	8	—	Cavan	24	33
Dublin	33	12	Monaghan	21	6
Queen's County	—	2	Armagh	56	36
Carlow	5	5	Belfast	1	—
Wicklow	9	5			
Kilkenny	57	30	Total	385	226
Wexford	1	—			
Total	243	99	Munster:—		
Connaught:—			Clare	177	47
Leitrim	1	3	Kerry	2	—
Sligo	—	47	Cork	40	37
Mayo	1	27	Waterford	—	4
Galway	40	84	Tipperary	101	72
Roscommon	2	2	Limerick	92	46
Total	44	163	Total	412	206
			Grand Total	1,084	694

Note.—Between the amount of the totals of this and the preceding return, and the number of assisted immigrants shown in the return (p. 627), will be observed a difference of 141, which is composed of persons who were not born in the United Kingdom; but, with few exceptions, were the children of English parents who had been resident in France. The counties given are the native counties.

Return of Expenditure on Account of Assisted Emigration to Sydney and Port Phillip, during the year 1848.

	Sydney.	Port Phillip.	Totals.
Total Passage-money at the contract rate (including half-price for all above one year who died on the voyage)	45,806 12 8	37,287 17 2	83,094 9 10
Paid by the immigrants, or out of British funds	1,338 16 8	507 5 1	1,846 1 9
Paid out of the colonial emigration fund	44,467 16 0	36,780 12 1	81,248 8 1
Gratuities to surgeons, officers, constables, &c.	3,486 10 0	2,745 11 0	6,232 10 0
Total charged on the colonial fund for conveyance and superintendence	47,954 15 0	39,526 3 1	87,480 18 1

Note.—The average contract price for the conveyance of each adult passenger was £12 11s.

Ages of the Assisted Immigrants who arrived during the year 1848.

Age.	Where from.								Total.	Where landed.			
	England.		Scotland.		Ireland.		Elsewhere.			Sydney.		Port Phillip.	
Years.	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.		Males.	Fem.	Males.	Fem.
Under 1	95	92	33	40	29	25	4	8	326	89	94	72	71
1 to 4	176	169	53	42	41	14	15	15	525	162	137	123	103
4 to 7	132	127	47	31	23	24	13	17	414	133	103	82	96
7 to 14	329	266	85	62	90	53	19	12	960	287	244	236	193
14 to 21	432	362	131	117	90	620	8	7	1,767	381	593	280	513
21 to 45	1,260	980	440	377	324	398	4	19	3,802	1,110	1,004	2,028	1,774
45 to 50	40	23	11	14	1	2	—	—	91	23	16	29	23
Total.	2,464	2,019	800	683	598	1,180	63	78	7,885	2,185	2,191	1,740	1,769

Number of Assisted Immigrants who arrived during the year 1848, who can read and write.

Age.	Where from.				Total.	Where landed.	
	England	Scotland.	Ireland.	Elsewhere.		Sydney.	Port Phillip
Under 4 years:—							
Cannot read . . .	521	166	107	42	836	471	365
Read only . . .	11	2	2	—	15	11	4
Read and write	—	—	—	—	—	—	—
From 4 to 7 years:							
Cannot read . . .	148	39	39	18	244	138	106
Read only . . .	101	34	7	10	152	91	61
Read and write	10	5	1	2	18	7	11
From 7 to 14 years:							
Cannot read . . .	56	11	43	4	114	63	51
Read only . . .	291	62	80	17	450	243	207
Read and write	248	74	64	10	396	225	171
From 14 to 21 years:							
Cannot read . . .	45	8	222	2	277	109	168
Read only . . .	201	35	176	6	518	322	196
Read and write	548	205	212	7	972	543	429
From 21 and upwards:							
Cannot read . . .	154	31	152	3	340	219	121
Read only . . .	508	125	188	1	822	468	354
Read and write	1,641	686	385	19	2,731	1,466	1,265

Trades or Callings of the Adult Males and the Unmarried Adult Females who have arrived in the Colony as Assisted Emigrants, during the year 1848.

Trade or Calling.	Where from.				Total.	Where landed.	
	England.	Scotland.	Ireland.	Elsewhere.		Sydney.	Port Phillip
Agricultural Labourers	1,146	296	332	8	1,782	969	813
Gardeners	46	15	4	—	65	38	27
Farm Bailiffs	6	—	5	—	11	11	—
Shepherds	43	114	14	—	171	77	94
Herdsmen	—	1	2	—	3	2	1
Domestic Servants	507	260	804	12	1,583	864	719
Carpenters	112	41	10	—	163	81	82
Masons	15	6	2	—	23	15	8
Quarrymen	5	1	1	—	7	4	3
Bricklayers	20	3	1	—	24	13	11
Brickmakers	19	6	—	—	25	20	5
Sawyers	13	8	—	—	21	16	5
Plasterers	1	—	—	—	1	—	1
Butchers	19	1	2	—	22	13	9
Bakers	7	13	—	—	20	12	8
Grocers	2	—	—	—	2	2	—
Millers	2	1	—	—	3	2	1
Brewers	1	2	—	—	3	1	2
Confectioners	—	1	—	—	1	1	—
Maltsters	—	1	—	—	1	1	—
Poulterers	—	—	1	—	1	1	—
Tailors	6	4	1	—	11	7	4
Shoemakers	6	2	1	—	9	5	4
Dressmakers	35	10	10	—	55	42	13
Bonnetmakers	4	—	—	—	4	4	—
Strawplaiters	2	—	—	—	2	2	—
Tailoresses	1	1	—	—	2	2	—
Embroideresses	—	—	1	—	1	—	1
Needlewomen	10	1	—	—	11	—	11
Smiths	104	34	8	2	148	90	58
Wheelwrights	18	7	6	1	32	19	13
Cabinet Makers	8	6	1	—	15	8	7
Porters	—	1	—	—	1	1	—
Printers	—	3	—	—	3	2	1
Shipwrights	1	1	—	—	2	2	—
Flax Spinners	—	1	1	—	2	2	—
Total	2,119	841	1,207	23	4,230	2,329	1,902

Religious Persuasions of the Immigrants who arrived during the year 1848.

Religious Denominations.	Where from.								Total.		Where landed.			
	England.		Scotland.		Ireland.		Elsewhere.				Sydney Dist.		Port Phillip	
	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.
Ch. of England	1,764	1,428	40	32	119	304	56	58	1,979	1,822	1,103	1,035	876	787
Ch. of Scotland	21	21	604	513	44	89	—	4	669	627	335	329	334	298
Wesleyan Method.	384	323	14	11	1	2	7	8	406	344	221	172	185	172
Other Protestants	266	224	115	103	4	1	—	—	385	326	197	171	188	155
Roman Catholics	23	19	27	26	430	784	—	8	480	837	324	481	156	356
Jews	6	4	—	—	—	—	—	—	6	4	5	3	1	1
Totals	2,464	2,019	800	683	598	800	63	78	3,925	3,960	2,185	2,191	1,740	1,769

To administer the consolations of religion, there are at Victoria ministers of different persuasions as follows:—church of England, one bishop and nine chaplains; church of Scotland, five chaplains; church of Rome, one bishop, and seven chaplains; Independents, Baptists, and Jews, one each. The salaries of the chaplains vary from £100 to £300 per annum.

Earl Grey has judiciously directed that aid be given for the transmission of female orphans of all religious denominations from the United Kingdom to Australia, and ordered that every practicable precaution be adopted for the safe conveyance of these friendless children, and for their protection on arriving in the colony.

At Melbourne, a building has been erected for their reception, and a similar committee to that formed at Sydney has been appointed there, consisting of the following members:—The Right Rev. the lord bishop of Melbourne; the Right Rev. Dr. Goold, Roman catholic bishop; Edward Curr, Esq., justice of the peace; the Very Rev. P. B. Geoghegan, Roman catholic vicar-general; the Rev. Irving Hetherington, minister of the Scots church at Melbourne; William Lonsdale, Esq., sub-treasurer; John Patterson, Esq., acting agent for immigration; Robert Williams Pohlman, Esq., barrister-at-law, and commissioner of the Insolvent Court; James Hunter Ross, Esq., solicitor; Andrew Russell, Esq.; James Simpson, Esq., commissioner of crown lands; the Rev. A. C. Thompson, incumbent of St. James', Melbourne. The plan has answered well, and many parentless children, who had no prospect before them, in Great Britain or Ireland, but penury, and perhaps a career of vice, have been placed in a position to become respected and opulent members of society in Australia.

The relative proportion of the population of the United Kingdom is—England, 59.6

per cent.; Scotland, 9.8 per cent.; Ireland, 30.6 per cent.

The number of emigrants sent out to New South Wales since the resumption of emigration, in 1847, has been—English, 14,088; Scotch, 3,638; Irish, 6,911; total, 24,637; being in the proportions of—English, 57.2 per cent.; Scotch, 14.8 per cent.; Irish, 20.0 per cent.

Of the Irish, 2,488 were orphan girls, who were taken as being a class well suited to the peculiar wants of the colony, and as being, for many reasons, the most eligible class of Irish emigrants that it was possible to select: they have, in general, given satisfaction in the colony. It is due to the Irish to state that they make excellent settlers in a young colony; the Celtic desire for the acquisition of land, and of thereby realizing an independence, forms an inducement to industry and frugality, which is attended with beneficial results; and many Irish who have landed without a shilling in Australia are now the owners of a considerable amount of property.

Those who are alarmed at the present deficiency of female population in Australasia will have their fears removed, at least as regards the future proportion of the sexes, by the following statement, given on the authority of her Majesty's emigration commissioners. According to the 1846-7 returns, the male and female population of each of the Australian colonies was as follows:—

Colony.	Males.	Females.	Excess of Males.	Date of Return.
New South Wales:				
Sydney District.	92,389	62,145	30,244	} Census of 1846.
Port Phillip do.	20,184	12,695	7,489	
Van Diemen's Land	47,813	22,313	25,500	} Blue Book, 1848.
South Australia	21,527	17,139	4,388	
Western Australia	2,818	1,804	1,014	
New Zealand	4,996	3,835	1,161	

The number of unmarried male and female emigrants sent to Sydney, Port Phillip

and South Australia, since 1st of January, 1848, has been, to—Sydney, males 2,182, females 3,618; Port Phillip, males 2,160, females 3,094; South Australia, males 1,692, females 2,191.

It will be seen from these returns that, both in New South Wales and Van Diemen's Land, there now exists a considerable excess of males over females. A similar disproportion exists in Western Australia, and, to a less extent, in South Australia and New Zealand. But it is not likely that the three last colonies will absorb any considerable number of female emigrants at present. The outlet for this class of emigrants must be sought principally in New South Wales or Van Diemen's Land. In regard, however, to New South Wales, it is to be observed that the disproportion between the sexes is continually and rapidly decreasing. In 1836, the number of males and females in the colony was—males 55,539, females 21,557; being in the proportion of five to two. In 1841, the numbers were—males 87,298, females 43,558; being in the proportion of four to two. In 1846, the numbers were—males 112,573, females 74,840; being in the proportion of three to two. And a further analysis of the last census (that for 1846) will show more clearly both the cause of the existing disproportion and the rate at which it may be expected to right itself. Thus, in the population under twenty-one years of age, the number of males and females is very nearly equal; between twenty-one and forty-five, the proportion of males to females is not quite two to one; and, among those upwards of forty-five, not quite three to one. The actual numbers are—under twenty-one, males 40,071, females 39,779; twenty-one to forty-five, males 59,009, females 30,315; forty-five and upwards, males 13,493, females 4,746; total, males 112,573, females 74,840. It is evident, therefore, that in the course of a very few years, as the old convict population* dies off (and, excepting in 1849, no additions have been made to it by transportation for several years past), the disproportion of the sexes will disappear, even without any special measures for that object.

The average retail price of provisions and

* In Victoria, as well as in New South Wales, the leaven of a convict population, whose religious and moral instruction was neglected, have, in a comparative degree, caused a considerable amount of crime. The convictions in Melbourne, in 1848, were—murder, 1; manslaughter, 2; shooting, wounding, &c., 6; rob-

clothing in the district of Port Phillip, quarter ending 31st March, 1849, was as follows:—

Wheat, 4s. per bushel; bread, first quality, 2d.; second quality, 1½d.; flour, first quality, 2½d.; second quality, 1¾d.; rice, 3¾d.; oatmeal, 5d.; tea, 2s. 1d.; sugar, 3¾d.; coffee, 11d.; sago, 9d.; fresh meat, 2d.; salt meat, 2d.; fresh butter, 1s. 3d.; salt butter, 1s.; English cheese, 1s. 3d.; colonial cheese, 7½d.; salt, 1½d. per lb.; potatoes, 8s. per cwt.; colonial wine, 6s.; imported wine, 15s.; brandy, 25s.; colonial beer, 1s. 10d.; imported beer, 3s. 6d. per gallon; candles, 5d. per pound; lamp oil, 2s. 9d. per gallon; soap, 5d. per pound; starch, 11d.; blue, 2s.; colonial tobacco, 2s. 6d.; imported tobacco, 4s. Moleskin jackets, 8s. each; moleskin coats, 14s. 6d.; waistcoats, 5s.; moleskin trowsers, 7s. per pair; flushing trowsers, 11s.; coloured shirts, 2s. 8d. each; strong boots, 12s. 6d. per pair; strong shoes, 10s.; shepherd's coats, 18s. each; socks, 10½d. per pair; handkerchiefs, 9d. each; straw hats, 5s.; print dresses, 6s.; merino dresses, 15s.; flannel petticoats, 7s.; calico petticoats, 2s. 10d.; stockings, 1s. 6d. per pair; shoes, 7s.; caps, 2s. 10d. each; shawls, 10s.; shifts, 3s.; stays, 6s. per pair; check aprons, 1s. each; straw bonnets, 4s.; flannel, 2s. per yard; calico, 7d.; blankets, 13s. per pair; sheeting, calico, 1s. per yard; mattresses, 10s. 6d. each; rugs, 5s.

Average Wages of mechanics, &c., in Port Phillip district, quarter ending 31st March, 1849.

Trade or Calling	Average Wages.	
	Town, per diem.	Country, per annum.
MALES:—	<i>s. d.</i>	
Carpenters	6 0	£43
Smiths	6 0	39
Wheelwrights	5 6	39
Bricklayers	6 0	40
Masons	6 0	40
Farm Labourers	—	23
Shepherds	—	21
FEMALES:—		
Cooks (Plain)	—	16
Housemaids	—	14
Laundresses	—	14
Nursemaids	—	13
General House Servants	—	14
Farm-house Servants, } Dairywomen, &c. . . }	—	14

Note.—In the case of the country labourers, the price paid for their services includes board and lodging, which consist of a dwelling, with a ration of 10lbs. meat, 10lbs. flour, 2lbs. sugar, and 4 oz. tea (or milk, in lieu of sugar and tea), per week. The wives of farm labourers with families do not receive this amount of money wages, as a sufficient quantity of food is generally allowed for the support of their children and a corresponding deduction is of course made.

The expense of erecting a country dwelling suitable to an agricultural labourer is from £5 to £20, according to the materials, the locality, and the extent of accommoda-

tion. Burglary, 2; housebreaking, 1; stealing in dwelling, 5; larceny, 51; forgery and uttering, 13; horse stealing, 9—total felonies, 98. Misdemeanours—assault, 10; riot and assault, 15; bribery, 1; obtaining money under false pretences, 1; libel, 1—total, 28. Capital convictions, 1.

tion; but country labourers are provided with rent-free dwellings by their employers.

The rent of a town lodging suitable to a mechanic and his family has greatly increased since the gold discoveries.

There is no fund in the district for the relief of the destitute poor; but there are at Melbourne two societies, viz., the Stranger's Friend and the St. James's Church societies, which afford assistance to the poor and sick. Some immigrants have been rationed at the public expense.

It is not possible to say what amount of labour Victoria province is capable of receiving. According to the area and fertility of the soil, 20,000,000 people could with ease be sustained; the cry still is—*Give us labour*. This is shown in the following paper, compiled from returns from the principal benches of magistrates in the district of Port Phillip, showing the agricultural and other productions, and the demand for labour, &c., in each of the districts named, in the first quarter of the year 1849:—

Districts.	Principal Agricultural and other Productions of the District.	Demand for Labour, and description of Labourers required.
Melbourne	Wheat, oats, potatoes, barley, vegetables of all sorts in abundance. <i>Gold.</i>	Most parts of the district are still requiring labourers; the city and vicinity a little better supplied than heretofore, in consequence of late arrivals of immigrants. All kinds of labour required.
Western Port . . .	Wheat, oats, potatoes, and maize . . . <i>Gold.</i>	There is still ample room for any number of immigrants likely to arrive; but single men and young married people without many children are generally preferred in the bush. Shepherds and farm servants are the descriptions of labourers in request.
Portland	Wheat, oats, hay, vegetable, wool, hides, tallow, black oil, black cattle, and sheep.	The scarcity of labour was never more severely felt.
Geelong	Wheat, barley, oats, potatoes, and all kinds of vegetables <i>Gold.</i>	The families of mechanics exceeding three, without adults, may probably meet with difficulties on their arrival. Domestic servants, farm servants, and shepherds are in request.
Murray	All kinds of grain	Agricultural and pastoral labourers are in request.
Gipps Land	Grain, wool, and fat stock for exportation	Shepherds, stockmen, and farm labourers are in request.

The following statement is compiled from returns from the principal police divisions of the district of Port Phillip, showing the rates of yearly money-wages given in each division in the first quarter of the year 1849—food and lodging being provided by the employers:—

Trade or Calling.	Melbourne.	Western Port.	Portland.	Geelong.	Murray.	Gipps Land.
Carpenters	—	£52	£38	£40	—	—
Smiths	—	40	38	40	—	—
Wheelwrights . . .	—	40	38	40	—	—
Bricklayers	—	—	—	40	—	—
Masons	—	—	—	40	—	—
Farm labourers . . .	£16	27	28	20	£20	£30
Shepherds	16	23	27	18	20	25
Cooks	16	17	26	—	—	—
Housemaids	14	12	20	—	20	—
Laundresses	14	17	28	—	—	—
Nursemaids	13	10	18	—	—	—
Farm Servants . . .	14	17	—	—	—	—
House Servants . . .	14	17	24	—	—	—

Country lands, as in the other Australian colonies, are offered for sale, from time to time, by public auction, at an upset price, as fixed by act of Parliament, of 20s. per acre; but farms enclosed, and partially or wholly cleared of timber, may occasionally be obtained, on a lease of three to five years, at a rent varying from 5s. to 10s. per acre. The number of leaseholders in this district,

as well as in New South Wales, is increasing; and such a course of procedure is advisable for newly-arrived immigrants who have but little capital, are not acquainted with farming, and require time and practice to understand a pursuit which at first sight appears very simple, but which really requires more watchfulness, steady labour, frugality, and even scientific knowledge, than any of the ordinary branches of manufacturing industry.

In 1848, the squatting licences issued for Port Phillip were, *within* the then settled districts, 383; *without* them, 18,863; total, 19,246; and the land sold in Port Phillip was 18,007 acres, for £24,030.

Squatters holding land under lease from the crown for pastoral purposes may, by permission of the crown commissioner for the district, transfer their "run" to another person. The price is determined not merely according to the quantity of land in the lease or "run," but by the healthy condition of the sheep, the purity of the breed, supply of water, contiguity to a shipping port, the quality of the pasture, and other circumstances. "Clean stations" average a sum of 9s. to 12s. for each head of sheep; the purchaser receiving also huts, hurdles, fencing, and implements, and taking the stock at a

valuation. A cattle station, which is considered less profitable than a sheep run, sells at the rate of 30s. to 40s. for each beast. Superior sheep and cattle sell at higher rates. Each sheep "run" carries at the least 4,000 sheep, or an equivalent number of horned cattle, for which a rental is paid to the crown of £10 per annum, and £2 10s. for every additional 1,000 sheep, or equivalent number of cattle.

Every large sheep or cattle "run" has an overseer, whose salary ranges from £50 to £200 per annum. The firm of Boyd & Co., it is said, paid their overseer £800 per annum; but their sheep amounted to nearly 200,000. Some young men judiciously commence as overseers, and learn their business before they invest their capital in stock. The *homestead* is the head-quarters of the overseer, who visits the distant flocks, supervises the shearing, the packing in the wool presses (with which the wool-sheds are each provided), and the despatch of the drays with the packs to Melbourne, Geelong, or Portland. Spacious steam boilers are also being attached to each homestead, for converting the fat into tallow, ready for shipment to England.

It is due to the class of Australian gentlemen termed the "squatters," to state, that but for them, Port Phillip would have been reduced to as low a condition as South Australia was before the discovery of its copper mines. Those who bought land largely at the government auction sales in Sydney and Melbourne, were ruined; their purchases were no more proof of the soundness of the "Wakefield theory," than was the purchase of scrip during the railway mania a proof of the prosperity of this country. In both instances, capital was transferred from industrious pursuits to be invested in gambling speculations. The squatters remedied the error; for like a young oak tree, around which a band of iron had been placed to prevent its growth, but which the expanding bark soon enveloped in its folds—so the squatters passed the settled boundaries of Port Phillip and of New South Wales, and found food for their increasing flocks and herds, which an act of Parliament would otherwise have prevented. By this means staple exports of wool, tallow, hides, horns, skins, and meat, were created; the colonies were enabled to import in return for their products, British manufactures; labourers were required to tend their sheep, the steady pursuit of wealth by industry and

perseverance took the place of land gambling, the settlements were rescued from the gripe of "land-sharks," and the wide-spread ruin caused by the "Wakefield system," to some degree mitigated. But the injurious effects of an erroneous course of policy are not so immediately remediable; unfortunately, a class-interest is created, who having paid a high price for their land, are not desirous of a reduction in the market price; some of the squatters also, knowing they can rent a "run" from government capable of feeding 6,000 sheep for £10 a year, prefer the maintenance of the present system, which practically prevents the sale of any land, except in the neighbourhood of towns, or for some special purpose. Until, however, a method be adopted, by which land may become a marketable commodity, no improvement can take place in Victoria province in any degree commensurate with its immense *agricultural* capabilities. Emigrants who can obtain fine land at 3s. to 5s. an acre, in British America, the United States, and Natal, will not be induced to pay 20s. in Australia. It is quite a different thing, to make free grants of blocks of several thousand acres to persons without capital, and to sell it at a moderate price; and yet the argument for fixing a price on land far beyond its real value, is based on the error alleged to be committed in Western Australia, where the granting of land free was not the cause of failure, as will be subsequently shewn.

In 1835 there were sold in the United States, about 12,000,000 acres of land; in 1836, about 20,000,000 acres; in 1837, the quantity fell to 5,000,000 acres; in 1838, 12,251,966 acres were offered for sale by public auction, and only 1,388,733 acres sold; the price paid was \$1,749,401, or about \$1¼ (5s. 7½d.) per acre. The sales declined annually, until 1841. In 1842, they again increased to 1,600,000 acres, and advanced gradually to 2,200,000 acres, in 1847. Since 1819, the price has not exceeded \$1¼ per acre; and it is now proposed to grant a certain quantity of land to every single or married immigrant who settles in the States. This is the best mode of attracting labour, and until something effective be done by reducing the price of land in Australia to its proper value, our surplus population will proceed by tens of thousands to America, compared with tens of hundreds who may be induced to voyage 15,000 miles to Australia. [See Supp^t.]

BOOK IV.—SOUTH AUSTRALIA.

CHAPTER I.

ORIGIN—HISTORY—DISASTERS AND PROGRESS.

THE history of this now thriving settlement affords a remarkable instance of the truism that men and nations frequently overlook the wealth and advantages which are, as it were at their own door, and seek a doubtful good by speculative efforts remote from the practical field of operation which lies immediately before them. For nearly fifty years England had possessed a colony in New South Wales, and had been acquainted with the salubrity of the climate, the fertility of the soil, and the maritime advantages of the position, before any further inquiry was made into the intrinsic value of other parts of the vast island-continent over which her dominion had been established. As in other instances a superficial examination of the mere coast-line had been deemed sufficient; and one of the naval officers employed, and considered with reason the first authority on the subject (Captain P. P. King, R.N.), stated before the Philosophical Society of New South Wales, in the year 1822, that "*the South coast of Australia is barren, and in every respect useless and unfavourable for colonization.*" How far this sweeping condemnation of a country larger than Great Britain, of which moreover only a small part even of the coast could have been seen by Captain King, is consistent with fact, will be seen in the following pages.

The inland discoveries of Oxley, Cunningham, and others, to the westward, northward, and southward of Sydney, from 1817-18 to 1827-28 (see page 383), and the extreme drought of three years' continuance induced reflecting persons to consider whether that portion of Australia open to the south winds of the Pacific might not be found better supplied with periodical rains, and that the dip of the land would be as in other parts of the world, and especially in the eastern hemisphere, from north to south, consequently that the great water-courses of the Blue Mountains, which served as drains for the country west of the sea-coast range, would be found to have a southerly direc-

tion. This opinion I expressed at the time in Australia, and stated that it was founded on what I had witnessed in Southern Africa, Madagascar, and other adjacent regions.

To Captain Sturt, an officer then serving with his regiment in New South Wales, belongs the great merit of solving this problem, of pointing out the capabilities of South Australia for a colony, and of giving an additional stimulus to the interior exploration. The adventurous journeys of Captain Sturt have been detailed (pages 383-384); after a perilous navigation of nearly a thousand miles, in a frail boat, on an unknown stream, with rapids, shallows, sandspits, and sunken trees; the banks crowded with bands of hostile natives, and the country whither he was being hurried totally unknown, this gallant officer and his brave companions found their toils rewarded by arriving in the early part of the year 1830 at a large lake, from whence they soon reached the Pacific Ocean at Encounter bay, in the meridian of 138° 56' E. The loss by accident of a portion of his provisions compelled him to hasten his return towards Sydney, up the Murray, an undertaking far more arduous than his course down that stream with the current. This severe labour was successfully accomplished after eighty-eight days of incessant exertion and sufferings, which produced insanity in one of the party, and temporary blindness in their heroic leader. "It is impossible," says Major-General Sir Charles James Napier, "to read the account of Captain Sturt's expedition down the Murray without feeling much admiration for our countryman and his companions—an intrepid enterprize! Unanimated by the glory of battle, yet accompanied by the hardships of a campaign, without splendour and without reward. This little band of undaunted men well knew that severe trials awaited their bold adventure, perils from men, from water, and from starvation; and if they fell amidst these dangers, no fame would attend their memory,

their courage would be unheard of, and their death mourned only by a few friends. Nor was the fortitude with which they extricated themselves from the dangers of the desert less to be admired than the boldness with which they entered these wilds."

The brave ever respect the brave, and this desire of a distinguished officer, who often met death face to face in the battle-field, to "express the admiration he felt for these intrepid explorers, and to spread the record of their names,"* will be appreciated by all who estimate at its right value what is noble in man. But it is only those who have themselves traversed trackless wilds, traced to their sources rivers hitherto unknown, and navigated stormy and unsurveyed coasts, amidst tribes of savages more bloodthirsty than the tiger, who can estimate at its true worth the value of the services which Sturt, Mitchell, Leichardt, Eyre, Grey, Cook, Flinders, King, Stokes, Blackwood, Jukes, and other really great men have rendered by their discoveries in Australia.

On the return of Captain Sturt to Sydney, he stated, in his official report, an opinion of the country he had explored, as follows:—"Cursory as my glance was, I could not but think I was leaving behind me the fullest reward of our toil in a country that would ultimately render our discoveries valuable. * * * My eye never fell on a region of more promising aspect, or of more favourable position, than that which occupies the country between the Lake and the ranges of St. Vincent's gulf, and continuing northerly, stretches away without any visible boundary." Sturt added, "that a closer survey of the interjacent country (from Encounter bay up St. Vincent's gulf) would, he believed, be attended with the most beneficial results."

Fortunately, the then governor of New South Wales saw the importance of prosecuting further inquiries in this new region. Governor Darling immediately acted upon the recommendation of Captain Sturt; and Captain Barker, of his Majesty's 39th regiment, then about being recalled from what was considered a useless position—King George's Sound—was directed to ascertain how far the opinions of Captain Sturt were correct. Barker arrived in Gulf St. Vincent in April, 1831, and while engaged in exploring the country in the neighbourhood of Lake Victoria, was killed by the abo-

* *Colonization, particularly in South Australia*, by Major-General Sir Charles James Napier.

rigines. Sturt pays a well-merited tribute to this victim of the treacherous savages of Australia, and describes his lamented brother officer as mild and affable, possessing the esteem and regard of every companion, and the respect of every one under his command; zealous in the discharge of his public duties; honourable and just in private life; a lover and a follower of science; indefatigable and dauntless in his pursuits; a steady friend; charitable, kind-hearted, disinterested, and sincere; in him the crown lost one of its most valuable officers, and his regiment one of its most efficient members. The Mount Barker district, named after this good man, evidences the grateful appreciation of his character felt by the colonists.

Mr. Kent, one of the party attached to the mission of Captain Barker, fully corroborated the report of Captain Sturt. He stated that the soil was rich; there was abundance of the finest pasturage; no lack of fresh water; and that it was "a spot, in whose valleys the exile might hope to build for himself and for his family a peaceful and a prosperous retreat." The intelligence of the discoveries of Captain Sturt, and their confirmation by Mr. Kent, produced in England an anxious desire to form a colony in South Australia; and in 1831, a committee was formed to consider the subject. I attended some meetings, about this period, in the Adelphi chambers, but finding it was resolved to fix a high price on the land, declined co-operating personally, but gave every aid in my power towards the extension of our occupation of the Australian territories. Great credit is due to Mr. Gouger, who, after he had formed three or four provisional committees, was often left alone, to work out, at his own expense, the noble object he had in view. In 1834, an influential committee was formed, which included eighteen members of the house of Commons, who resolved to carry out what was termed the "self-supporting system," by which the colony would be no expense to England, as money would be obtained by the sale of waste lands, whereby the labour would be conveyed from the United Kingdom, and the formation of a prosperous settlement would necessarily ensure the means of an adequate revenue for its local government. This was no new idea; it was not a theory, as it had been termed: the plan had been practised in the earlier British colonies in the western hemisphere; and for some years the sale of waste lands in the

United States, and the formation of colonies in the wilds of the "far west," were known to have been very successful.*

This system was marred in its application to the crown lands of Great Britain, by the attempt to engraft on it principles and regulations which neutralised or perverted its effect. As to what Mr. Wakefield somewhat vaguely terms a "sufficient price," neither himself, Lieutenant-Colonel Torrens, or any of its advocates, have yet agreed what this "sufficient price" is; and, in the search after this *ignis fatuus*, New South Wales would have been ruined, had not the squatters evaded the impolitic law which fixed twenty shillings as the minimum price for all lands—good, bad, or indifferent. To Mr. Wakefield is, however, due the merit of having urged the formation of a colony at South Australia, by the sale of the crown lands. Whether he was the author of the pound an acre price, or the two or three pounds per acre, subsequently proposed, does not clearly appear in his recent work.† Colonel Torrens avowed his advocacy of the high price.

The public, easily captivated with an apparently novel idea, and having little leisure

* The property of the soil of the whole of the territory of the United States, is vested, by the consent of the several state governments, in the general government of the confederation at Washington, excepting such lands as belong to private individuals, or have been appropriated by the separate states for educational and other purposes. The extent of this property is, certainly, not less than one thousand million acres, which at 2s. per acre, shews a value of £100,000,000 sterling. The public lands have long been considered in the United States a valuable source of revenue; in 1776, Silas Deane laid before congress a plan for the sale and settlement of the territory north-west of the Ohio, and the calculations of the future value of this region, caused the first conflict of opinion among the several states. On the 20th May, 1785, an ordinance was passed by congress, for ascertaining the mode of disposing of lands in the western territory. Under this ordinance, 121,540 acres were sold, and three large tracts disposed of by what was termed "special contract." The price varied from one dollar to two-thirds of a dollar per acre. On 10th May, 1800, an act of congress defined the *land system* of the United States, of which the first feature was the rigid survey of the public lands, founded upon a system of true meridians. The largest division was a township comprising thirty-six square miles = 23,040 acres, this was sub-divided into sections of one square mile each, and further into quarter sections = 160 acres. In each district a land-registry office was established, with two public officers appointed by the President of the United States—a registrar, and a receiver of public monies, with a salary each of \$500 a year, and a commission of one per cent. on the moneys paid into their office. For some years credit was allowed on all purchases of public lands; but this caused speculations, arrears, and relinquishment of

to inquire either how much of it is new, or how much of it is applicable to the subject in question, are too ready to take on trust assertions for truths, and to believe (for a time), that what is popularised, must be correct. Had Mr. Wakefield, in pursuance of his meritorious efforts to establish a British colony in South Australia, confined his views to the retention of the price fixed in 1831 by Viscount Goderich and Lord Howick (now Earl Grey), viz., 5s. per acre, much suffering and great distraction of legislation would have been avoided. I am personally unacquainted with Mr. Wakefield, and entertain no adverse feeling to his projects; but am, on the contrary, disposed to appreciate to the fullest extent exertions which have had for their object systematic colonization. The field for thought and action afforded by our vast colonial empire is wide enough to admit of every variety of opinion, and it is that very diversity which appears, under Providence, best calculated to elicit truth and awaken the mind of the nation to the deep and daily increasing importance of the subject; for colonization, it must be remembered, is a national—emigration, an purchases. But in the year 1820, an act of congress altered this system, substituted cash payments for the credit system, and reduced the *minimum* price at which waste lands were to be offered for sale by public auction, from two dollars to one dollar and a quarter per acre. Lands not thus sold were subsequently open to purchasers at the *minimum* price. The value of the public lands sold in the twelve land states of the United States from 1787 to 1st January, 1848, was, in dollars, as follows:—Ohio, \$13,599,602; Indiana, 13,902,325; Illinois, 14,740,417; Missouri, 9,643,931; Alabama, 10,764,654; Mississippi, 9,714,942; Louisiana, 2,908,356; Michigan, 9,000,720; Arkansas, 2,832,277; Wisconsin, 4,309,669; Iowa, 2,227,828; Florida, 926,613. Total \$94,551,334; which, at fifty pence the dollar, is equal to £19,698,184 13s. 4d. The area of these twelve land states is given at 392,579,200 acres, of which 304,376,348 acres are surveyed, and 78,812,286 acres are unsurveyed; 100,209,656 acres have been sold; and, on 1st January, 1849, 289,961,951 acres remained unsold. During 1847, 2,521,305 acres sold, for \$3,296,404. The quantity of land offered for sale in the year 1849 was 9,113,400 acres. In the territories of the United States, north and west of the regularly organized states, there are 208,332,000 acres of land to be sold at about 5s. an acre. What prospect have our colonies for selling land at 20s. an acre in Australia or New Zealand?

I must reserve for the conclusion of this work, further details on this important subject; but sufficient has been stated to shew the fallacy of the idea, that Mr. Wakefield had "*invented* a system for the sale of waste lands;" whereas a *judicious* system has been in operation in the United States for fifty years.

† *A View of the Art of Colonization*, by E. G. Wakefield. London: 1849.

individual—undertaking. My opposition, therefore, refers neither to individuals nor to theories, but to what I conceive to be the proved error of fixing a price on the waste lands of our colonies so high, as to drive emigrants with but limited means to the United States, where land is obtainable on moderate terms, and where, I believe, it is now contemplated to give every respectable immigrant a limited number of acres free of all charge. With this preliminary explanation, I proceed with an account of the formation of the colony of South Australia.

By the persevering exertions of Messrs. C. Buller, Wakefield, Whitmore, Grote, Angas, Torrens, Hutt, Rowland Hill, and other gentlemen, aided by the Duke of Wellington in the house of Lords, an act was passed on the 15th August, 1834, by the Imperial Parliament (4 & 5 William IV., c. 95), under which South Australia, within certain defined boundaries, viz., "that part of Australia which lies between the meridians of 132° and 141° of E. long., and between the Southern Ocean and 26° of S. lat., together with the adjacent islands thereto," were declared to be a British province. A board of three or more commissioners was to be appointed by the crown under the act, to carry the intentions of the legislature into effect; this board was to be represented in the new colony by a resident commissioner; no convicts were to be sent to South Australia; the minimum price of land was fixed at 12s. per acre, to be disposed of in public by auction or otherwise, as the commissioners might deem best; the proceeds of all land sales to be applied to the purpose of sending out free emigrants; adult persons of the two sexes, as far as possible, to be in equal proportions of both sexes, and not exceeding the age of thirty years; no poor person—husband or a wife—could be conveyed alone to the colony, nor without their children; the commissioners were empowered to borrow money on bonds to the extent of £200,000, to pay the expenses of the colony, and to make it a charge on the revenue, produce of rates, duties, and taxes, as a colonial debt; whenever the population amounted to 50,000, a constitution was to be granted, and until this period had arrived, his Majesty might empower persons resident in the colony to make laws, levy rates, duties, and taxes, subject to the approbation of the king in council; the act was not to be in force until the sum of £35,000 had been raised by the sale of

land. The commissioners were further required to raise £20,000 by the issue of bonds, as South Australian revenue securities, and this sum was to be invested in the public funds, as a guarantee that the colony would at no time be a charge on the British exchequer. If within ten years from the date of this act of Parliament, there were less than 20,000 natural born subjects of his Majesty in the province, all the public lands then unsold would be liable to be disposed of by his Majesty in such manner as shall seem meet.

In May, 1835, the commissioners were appointed, Colonel Torrens chairman. They fixed the price at 20s. an acre, but it was found too high a price; for after the commencement of the sales, and notwithstanding incessant efforts for two months, considerably more than half the quantity of land required to be disposed of, in order to commence operations, remained unsold. The commissioners therefore announced, on 1st October, 1835, that "the price of land included in the preliminary sales should be reduced to 12s. per acre." The first purchasers were, accordingly, entitled to receive for £81, one acre of town land, and 134 acres of country land. This was little more than 12s. per acre, and a fair price, considering that an acre of *town* land was given. It was, nevertheless, still found difficult to fulfil the conditions of the act of parliament.

In this dilemma, an association, termed the *South Australian Company*, was formed, which owed its origin to Mr. G. F. Angas, who, with his own capital, and that of a few friends, who had confidence in his prudence and integrity, raised, at their own risk, the sum necessary to purchase a considerable quantity of land. When success, in going forward, thus became certain, these gentlemen handed over their interest in the project to a company, under the above designation, merely receiving five per cent. per annum for the use of the cash advanced. Mr. Angas, a gentleman of considerable experience, and of a fine energetic spirit, became chairman of the company, which dates its establishment from the 22nd of January, 1836, when £200,000 was subscribed, in 4,000 shares of £50 each, on which £5 per share were immediately paid. 13,770 acres (including 102 acres of the site of the first town) were purchased from the South Australian commissioners, on favourable terms, such as—the selection of their own la-

bourers; the reduced price of 12s. per acre, in lieu of 20s.; the right of purchasing one acre in the metropolis of the colony for every 134 acres of country land, this privilege being limited to 437 sections; the right, to purchasers of 4,000 acres and upwards, of selecting in any district they pleased; the privilege of leasing, for 10s. per annum, 640 acres of pasturage for every forty acres purchased, while non-proprietors had to pay 40s. for the same quantity.

The commissioners continued until the end of February, 1836, to sell land at 12s. an acre, to all who were able to satisfy them that the purchasers would take out adequate capital, to be employed in the improvement of the colony. The holders of the first 437 land orders were to have priority of choice, of both land and pasturage, over all others. Any one paying in advance for 4,000 acres had the right of requiring a survey to be made of any compact district not exceeding 40,000 acres, and, within a reasonable time after such survey, to select his 4,000 acres from any part of such district, before any other applicant. The privilege of selecting servants and labourers, for a free passage from England to the colony, was allowed to all purchasers in England, at the rate of one person for every £16 expended in land.

By the 24th section of the act, the South Australian commissioners were required to invest £20,000 in government securities, as a guarantee against the colony becoming a charge on England; and, as they were authorized to raise a loan of £200,000, at a rate not exceeding ten per cent. (18th section), they issued tenders for a loan to the amount of £80,000, to be received by instalments. Tenders, however, were received to the extent of only £13,000, at ten per cent. interest, and on the terms that the loans were not to be paid off, nor the interest reduced, for several years. The commissioners then proposed to raise £100,000, at six per cent., by bonds, to be issued at £80, for £100, and not to be paid off in less than twenty years. They could have raised the money on these terms, but the solicitor-general was of opinion that the act of Parliament did not authorize such a proceeding. After considerable delay and much private exertion, Mr. Wright, then an eminent banker in Henrietta-street, Covent-garden, and who was at that period one of the South Australian commissioners, agreed, on the 12th of November, 1835, to

advance £30,000 to the South Australian commissioners, on the following terms:—£20,000 to be paid down on the 18th inst., and the remaining £10,000 on the 15th of December following. The loan not to be paid off for ten years from the date of advance, and to bear interest at ten per cent. per annum, payable half-yearly, in London; a commission of two per cent. to be paid to Mr. Wright on £25,000. These terms were accepted; £20,000 were lodged in the Three per Cent. Consols, in the names of three trustees nominated by his Majesty's government, and the secretary of state approved of the transaction.

By these proceedings, but chiefly, as before observed, by the large purchases of the before-mentioned company, the South Australian act was brought into operation; and the crown appointed as governor of the province, on the recommendation of the commissioners, Captain Hindmarsh, a brave and experienced sailor, but totally unfit for a position foreign to all his past pursuits. Mr. J. H. Fisher was nominated resident commissioner, and Lieutenant-Colonel Light surveyor-general.

On the 1st of March, 1836, the commissioners raised the price of land to 20s. per acre, and announced that, at any time during the first year from the period of the landing of the governor, the price might be raised to 40s. per acre, by the colonial resident commissioner. All sales were to take place in the colony, but investments conferring the right to select labourers might still be made in this country; subsequently, however, sales were also made in England.

On the 20th March, 1836, the first vessel despatched by the South Australian commissioners, named the *Cygnets*, of 239 tons, sailed from London: she was followed by the *Rapid* brig, of 162 tons, both fast-sailing craft, under the orders of Colonel Light, the surveyor-general, accompanied by his surveying staff, who were ordered to prepare for the reception of the governor, and the chief body of settlers who were to follow in H.M.S. *Buffalo*, and two other vessels. The *Cygnets* and the *Rapid* were each fully equipped to act independent—supplied with provisions for one year, with proper surveying instruments, arms, ammunition, tents, clothing, utensils, tools, medicines, and necessaries of all kinds likely to be required; also with a boat fitted for surveying the various inlets, and a portable boat on a light carriage, for use in land explorations. The

expedition was composed, besides the surveying staff, under Colonel Light, of Captain Lipson, R.N., as harbour-master, two surveyors, and thirty mechanics and labourers, including three carpenters, two smiths, four woodmen, one shoemaker, and two or three gardeners, besides the crews of the vessels. Colonel Light was in the *Rapid*, with Messrs. Field, Pullen, and Hill, as first, second, and third officers; Messrs. Jacob and Symonds, as assistant-surveyors; and Mr. John Woodford, as surgeon. The *Cygnet* contained Mr. Kingston, the deputy surveyor-general, Captain Lipson, Messrs. Finnis, O'Brien, Neale, Hardy, and Cannan, as assistant-surveyors; Dr. Wright, as surgeon; Mr. Gilbert, as storekeeper; and a few passengers. As nothing was really known of the mainland, the vessels were ordered to proceed first to Nepean bay, in Kangaroo Island, which was to be the place of rendezvous, where the gardeners were to be landed—a plot of ground, stocked with vegetables; the provisions and stores not required for the purposes of the survey were to be disembarked, together with the wives and families of the officers and men, if arrangements could be made for their temporary accommodation and safety. The surveyor-general was then to proceed to examine the coast in the central parts of the intended colony, excepting the parts surveyed by Flinders; his attention was particularly directed to Nepean bay and Port Lincoln, but more especially to the line of coast from the east of Encounter bay to the north of Gulf St. Vincent, and the inlet in 34° 40' S. lat. was pointed out as demanding careful examination.

Wherever a good harbour was found, the land around for a considerable distance was to be explored, and if suited for the site of even a secondary town, to be surveyed. The responsibility of selecting a position whereon to found the future capital of the province devolved on Colonel Light, who although instructed to confer with the governor on the subject, (should he arrive before the selection was made,) and to pay due regard to his opinions and suggestions, was fully authorised to act according to his own convictions. The South Australian commissioners in London possessing no knowledge of even the coast-line, could only lay down general rules for the guidance of their surveyor; such as a commodious harbour, safe and accessible at all seasons of the year, a considerable tract of fertile land immediately adjoining, an abundant supply of fresh

water, facilities for internal transit, and for communication with other ports, distance from the limits of the province, "as a means of avoiding interference from without in the principle of colonization," and the neighbourhood of extensive sheep walks; and as of secondary value, building materials, such as timber, stone, brick, and lime; facilities for drainage and coal. When the most eligible spot was selected, the streets were to be laid out of ample width, arranged with reference to convenience, salubrity, and beauty, and with the necessary resources for squares, public walks, and quays. The district around the intended capital was to be arranged, mapped, and divided into sections of 134 acres each, of a form convenient for occupation and fencing, and a road reserved adjoining each section. All land on the coast within not less than 100 feet of high water-mark, and at least sixty feet along each side of a navigable river, and around every lake or other sheet of water, to be reserved as a public road. Collision with the natives was to be avoided, the wild animals to be considered as their property, and sporting by the Europeans to be discouraged as much as possible, and when districts were found inhabited, to be prevented altogether.

The *Rapid* reached Nepean bay, Kangaroo Island, on the 19th August, 1836, and the *Cygnet* on the 11th September following; they found three vessels belonging to the South Australian Company which had previously arrived, viz.—on 27th July, 1836, the *Duke of York*, which carried out emigrants and the colonial manager of the company (Mr. Samuel Stephens), who was subsequently thrown from his horse when riding on Mount Lofty range, and died on the spot; on the 30th July, the *Lady Mary Pelham*, and on the 16th August, the *John Pirie*, under the command of Captain Martin. The manager of the South Australian Company had landed, built a mud hut, surrounded it with a small battery, and hoisted the British ensign. The *Africaine*, Captain Duff (an able and energetic commander), arrived early in November, with emigrants, having on board the colonial secretary and the emigration agent. The *Tam O'Shanter*, *John Renwick*, and *Coromandel*, each with emigrants, soon followed; the latter vessel carrying out a banking institution, and the advocate-general and colonial surgeon. The women and children, store-keeper, gardeners, and stores, were landed from the *Rapid* and *Cygnet*, at Nepean bay.

and Colonel Light proceeded to examine Kangaroo Island; thence explored from end to end the western shore of Gulf St. Vincent; then visited Port Lincoln, in Spencer's Gulf, where the governor, Captain Hindmarsh, was expected, in the *Buffalo*. The surveyor-general did not deem Port Lincoln eligible for the site of the chief town; but one spring of water was found, and that below high-water mark; no good or clear land was seen, and the entrance to the fine harbour considered to be surrounded by shoals, rocks, tide-ripples, and other difficulties, which rendered the approach hazardous.

The explorers then proceeded to examine the east coast of Gulf St. Vincent, where they discovered a creek about fifty miles from the open sea, which proved to be the embouchure of a fresh-water river, and appeared to Colonel Light "as beautiful and safe a harbour as the world could produce." It was found to be sheltered from every wind, abounded in smaller creeks—one branch extending seven miles, and nearly one mile wide, and with a depth of three to five fathoms, suitable for vessels of three to four hundred tons. The country, where examined, resembled English park scenery, and consisted of widely extended open plains, moderately wooded, with a rich soil clothed with luxuriant grass, and watered by numerous streams. It sloped backwards from the coast for several miles, to a line of sandy hills, intersected by picturesque valleys terminating in an elevated range, to which the name of Mount Lofty was given; behind this range lay Lake Alexandrina (now Victoria), and the country of the Murray river. Colonel Light deemed this spot the most eligible for the site of the future capital of the province of South Australia,

* Considerable opposition was made for some time by several members of the colonial government, to the site chosen by Colonel Light, some contending for Port Lincoln, others for the neighbourhood of Encounter bay. Sir John Jeffcott, the judge, was in favour of the latter, and while endeavouring to prove the justice of his opposition, he lost his life, together with Captain Blenkinsopp, by the upsetting of a boat.

† The foundation of a new settlement in the wilderness is always an interesting ceremony, and among the ancients it was preceded by religious solemnities. On the present occasion, the course of proceeding was as follows:—as soon as H.M.S. *Buffalo*, with Captain Hindmarsh on board, came to an anchor, preparations were made for landing, and on the same day the gallant officer landed, escorted by a party of marines, and accompanied by the various official authorities, together with the ladies of their

and on the banks of the Torrens river, about seven miles inland from the anchorage, the plan of Adelaide was marked out.*

Captain Hindmarsh anchored in Holdfast bay on the 28th of December, 1836, and was immediately proclaimed governor.† Colonel Light, under the authority of the commissioners, had, as previously stated, fixed the site of the future city of Adelaide before Captain Hindmarsh arrived, who, although he had accepted the appointment on condition of "non-interference with the officers appointed to execute the surveys and to dispose of the public lands," soon acted as if he was on the quarter-deck, where no one dare question his judgment. Disputes arose between the governor appointed by the crown, the resident commissioner, Mr. Fisher, Colonel Light, and, in fact, between most of the officials.

In March, 1837, the town lots were selected; but the country lands were not allotted until May, 1838, and then only partially. The settlers, on arriving, found living very dear; the lands, for which they had paid in England, were not granted immediately; and the controversies of the authorities caused great discontent. The commissioners in England, on the 22nd of December, 1837, addressed a despatch to Lord Glenelg, his Majesty's secretary of state, complaining of the governor, who, on the 21st of February, 1838, was recalled.

The conduct of the official authorities under governor Hindmarsh appears not to have been very creditable, and made his administration of the affairs of the province a matter of great difficulty. The resident commissioner (Mr. J. H. Fisher), appointed by the Australian commissioners in London, refused to obey the authority of the governor; and when Captain Hindmarsh had dis-

several families. They were received in the tent of the colonial secretary, by the gentlemen who had previously arrived with Colonel Light, who had fixed their temporary habitations on the plains afterwards named Glenelg. The commission of the king, appointing Captain Hindmarsh governor, was read to the assembled settlers, numbering about 300; the appointments of the members of council and of the executive government, were announced; the customary oaths of office were administered to the governor by the colonial secretary, the British flag was hoisted under a royal salute, the marines fired a *feu-de-joie*, the *Buffalo* saluted his excellency the governor with fifteen guns, a dinner, or rather cold collation, was laid out in the open air, the health of his Majesty was drunk with enthusiasm, the national anthem was played and sung, healths were given and speeches made.

missed an emigration agent, named Brown, for neglect of duty and inhumanity towards the emigrants, (one of whom, named Trollope, died in the public hospital at Adelaide, in a state of destitution,) Mr. Fisher publicly placarded *his* reinstatement of Brown. The colonial secretary, Mr. Robert Gouger, and the colonial treasurer, Mr. Osmond Gilles, fought in the streets of Adelaide publicly, and were taken into custody by the serjeant of marines, who acted as chief constable. The offenders were conveyed to government house, detained ten minutes, and then liberated, on their parole to keep the peace. The colonial secretary was aided and abetted by Mr. Mann, the advocate-general of the colony. The governor suspended Mr. Gouger from his duties as colonial secretary, who thereupon threatened to bring an action against the governor for "false imprisonment—damages, £10,000." This is a sample of the disagreeable proceedings which took place in the infant state of the settlement, of which details are given in the *South Australian Gazette*, No. 6, for September, 1837, and in other numbers.

The next recommendation of the commissioners of a governor was even more unfortunate than the preceding. One of the chief claims of Captain Hindmarsh was, that he had distinguished himself at the battle of the Nile, and fought under Lord Nelson. So, also, his successor, Lieutenant-Colonel Gawler, had been "present at many of the great sieges and battles in the Peninsula—Badajoz, Vittoria, Nivelles, Orthes, Toulouse, and lastly at Waterloo, where he commanded the right flank company of the 52nd, during the great charge on the imperial guards." What evidence the meritorious conduct of a midshipman or captain of a company at the Nile and at Waterloo could afford of the adaptation of the individual for the peculiar duties of civil governor in a young agricultural settlement, it would be hard to divine. It is quite true, that naval and military officers have occasionally (though seldom) made efficient governors of colonies; but they are exceptions to a rule. Much of the long-protracted misrule of some of our colonies may be traced to the evil of appointing soldiers and sailors as civil governors, irrespective of their aptitude and fitness for such important and difficult duties. But another opportunity will occur for the examination of this subject when treating of the *Colonial Policy of the British Empire*.

The recommendation of the commissioners

was, however, adopted; and Lieutenant-colonel Gawler was appointed by the crown governor of South Australia; the resident commissioner, Mr. Fisher, was removed, and the duties of his office were entrusted to Colonel Gawler, who thus represented, in his own person, the interests of the crown and those of the South Australian commissioners: he assumed the duties of his office in the colony on 12th October, 1838. An act of the imperial legislature, (1 & 2 Vict., c. 60), passed 31st July, 1838, amended act 4 & 5 William IV., and empowered the commissioners, or their representative in the colony, with their consent, to borrow such sums from the land fund as might be necessary for the efficient government of South Australia.

The lords of her Majesty's treasury, on 9th November, 1838, issued minute instructions on the subject of expenditure. On 8th February, 1839, the resident commissioner, (Colonel Gawler), was allowed, on account of some additional charges, to increase his expenditure, altogether, to £16,500 per annum; and later in the year he was informed, that the commissioners would be ready to afford pecuniary aid, to any moderate extent, in erecting wharfs at Adelaide; and they approved of the erection of a government house and public offices, "the total cost of which was not to exceed the estimate of £25,162." It is asserted, that a "general authority" was also given to Colonel Gawler, as the resident commissioner, to deviate from his instructions under circumstances of indubitable necessity. The sales of land, up to this period, were not of such extent as to justify any extravagant hopes, or expenditure of money. The Australian commissioners stated, that the whole of the land sold from the commencement of their proceedings on 15th July, 1835, to 7th December, 1837, consisted of 64,358 acres, for which they received £43,221. The details were—437 land orders, each for 135 acres, included in the preliminary sales, = 58,995 acres, £35,397; one deposit forfeited, £20; 200 land orders, exclusive of the preliminary sales, each for 80 acres at 12s. per acre = 1,600 acres, £960; land orders at 20s. per acre = 3,200 acres, £3,200; investment for the purchase of land in the colony, £50; amount received by the commissioner in the colony for sale of town sections by auction, not included in the 437 preliminary orders, 563 acres, £3,594; total number of acres, 64,358; total amount of purchases, £43,221.

In 1838, the sales were stated to be—January, acres, 320; February, 400; March, 880; April, 1,200; May, 1,200; June, 5,920; July, 4,480; August, 4,640; September, 4,480 = 23,520 acres.

The state of the colony at this period may be judged of by the following extracts from the speech of the official gentleman who ruled the affairs of the province from the period of the departure of Captain Hindmarsh, to the arrival of Lieutenant-Colonel Gawler. The acting governor, Mr. Stephens, after stating to the council the difficulties to be encountered, said—"I have *first* to announce, with regret, that *there are no funds in the treasury*; and the quarter's salary due to the whole of the public servants on the 30th June last, (1838), is at this day unpaid. *Second*—by the departure of the marines in H.M.S. *Alligator*, this province, with a population exceeding 4,000 persons, is abandoned to the protection of eighteen policemen, lately embodied by governor Hindmarsh; and there are now twenty-one prisoners confined in the weather-boarded hut used as a gaol, and perhaps double that number of desperate runaway convicts in the neighbourhood of the town. *Third*—there are no funds for the support of the force now constituting our only protection. *Fourth*—the embarrassed state of the survey department, and the want of land."

On the arrival of Colonel Gawler, on 12th October, 1838, at Adelaide, he found all things in confusion;* "the public offices with scarcely a pretension to system; every man did as he would, and got on as he could; there were scarcely any records of past proceedings, of public accounts, or of issues of stores; the survey department reduced to the deputy surveyor-general (Colonel Light had resigned), one draughtsman, and one assistant-surveyor—its instruments, to a great extent, unserviceable, and its office with scarcely any maps of the country, and totally without system, records, or regulations; the colonial finances in a state of thorough confusion and defalcation; the population shut up in Adelaide, existing principally upon the unhealthy and uncertain profits of land jobbing; capital flowing out, for the necessities of life, to Sydney and Van Diemen's Island, almost as fast as it was brought in by passengers from England; scarcely any *settlers* in the country; no tillage; very

little sheep or cattle pasturing, and this only by a few enterprising individuals risking their chance as squatters."

These were herculean difficulties—quite enough to have occupied the energies of any governor, and to warn him against extravagant expenditure. Meanwhile the most strenuous efforts were made by the commissioners to raise money by the sale of land, and the real merits of South Australia magnified until the public were well-nigh led to consider it the only settlement worthy of being the residence of a free Englishman. Large quantities of land were soon sold in London, where speculation was rife, in "town lots and country sections." Up to August, 1839, there were sold 250,320 acres of land, which produced £229,756; and 7,412 persons had arrived at Adelaide: but many of the English purchasers who bought these lands have not received, to the present day, any returns for their outlay.

Instead of directing attention to the cultivation of the soil, and the real foundation of the colony, Colonel Gawler launched out into a most lavish expenditure in the erection of public buildings quite unnecessary in an infant settlement, and which kept large numbers of the labouring classes in Adelaide dependent on government works when they ought to have been clearing, ploughing, and cropping the land on their own account. By this means the price of labour became inordinately high, and speculations in town lots and buildings the principal occupations of the people. In 1839 there were only 2,500 acres of land under cultivation.

The colonial revenue was about £20,000 per annum, the expenditure at the rate of £150,000 per annum. In the *first* quarter of 1839 it was £8,950; in the *second* quarter, £16,000; in the last quarter of 1839, £34,000; and in the last quarter of 1840, £60,155. The extravagance of all parties in the colony is abundantly proved in the documents laid before parliament in 1843. Amongst the items in these papers is the charge made by a police constable at Port Lincoln of "ten shillings for two pounds of *wax* candles for a *prisoner* for six nights;" this was certified by the "resident magistrate," but the auditor subsequently remarked—"it is not usual to allow felons any light in their cells; they are locked up when darkness sets in, and certainly do not require *wax candles*."

Individuals holding official situations under the government were allowed to supply

* Despatch from Colonel Gawler to Lord Glenelg, her Majesty's secretary of state for the colonies, 23rd January, 1839.

stores for the service of the department in which they held office, and the bills for such stores were rendered and paid some months before an examination took place by an auditor; among other stores thus supplied without any written authority, and for no known object, I perceive in the list "three tins of wine biscuits, £6 6s.," about ten times their value; "£105 for ten casks of port wine," no statement of the number of gallons in each cask; "£4 10s. for six tins (of 4lbs. each) preserved meat," or 15s. a tin, the then usual shop price in Adelaide being 5s. To a bullock driver, 11s. 8d. a day, and £4 a week for the hire of his bullocks. Everything else was in an equally wasteful ratio. The annual government expenditure for the support of the different departments was about £94,000, exclusive of buildings, roads, printing, emigration, and other charges; to meet this heavy outlay the colonial revenue amounted at the utmost to £30,000 a year.

While the governor in his capacity as resident commissioner was thus drawing upon futurity, the land sales in England were falling off, and the commissioners were obliged to raise temporary loans for colonial purposes, borrowed from the emigration fund, which all persons purchasing land in the colony had been assured should be solely expended in conveying labour to South Australia. By August, 1840, the amount due to the emigration fund was upwards of £90,000, which was expected to be replaced by the end of the year. This however was rendered absolutely impossible by the rapidity with which Colonel Gawler's bills came pouring in. The South Australian commissioners were, in August, 1840, compelled to lay a statement of their difficulties before Lord John Russell, who determined on instituting a parliamentary inquiry into the financial state of the colony, pending which inquiry there was no alternative but to dishonour the bills drawn by Colonel Gawler on the commissioners; which was done accordingly, to the great damage of the colony and of its interests.

Colonel Gawler was advised by the South Australian commissioners that no further funds remained in their hands, upon receipt of which intelligence he publicly notified his intention of drawing upon the lords of the treasury in his capacity of governor, for the purpose of paying the current expenses of the government. Large debts were thus contracted to store-keepers and others for supplies.

On the 26th of December, 1840, her Majesty's government were compelled to recal Colonel Gawler from South Australia; the grounds assigned by Lord John Russell were "that he had drawn bills in excess of the authority received from the commissioners." Whether this were so, or whether he had, as he appeared to believe, almost a *carte blanche* from the commissioners, there could be no doubt of the necessity of his immediate recal from a position for which he had proved himself in an important respect so ill qualified. Mr. Dutton represents Colonel Gawler as possessed of many virtues, and distinguished in private life by high intellectual attainments. This is, I believe, perfectly true; the colonists entertained for the gallant officer, whose moral conduct and personal character are unquestionable, great respect; but her Majesty's government were not the less bound to remove him as an incapable financier.

It is the opinion of an intelligent gentleman—one of the first emigrants to South Australia—that many of the difficulties of the colony arose out of the unwarrantable interference of governor Hindmarsh with Colonel Light and the resident commissioner. He asks—"Of what use was it to proceed with the country surveys, when the colonists were led to believe that the site of the chief town or city selected by the surveyor-general would not be confirmed by the South Australian commissioners at home? Who would think of selecting or purchasing, and then locating on land, under such circumstances? The people were frightfully unnerved; this was the reason of the land not being tilled; the capitalist, the farmer, the emigrant remained in the town, squandering their money, and gambling in town allotments. Many of those people who, perhaps, held preliminary land orders, found, when the excitement subsided, and their land could be selected with safety, that their ready cash had vanished, and their land orders were mortgaged."

There is a great deal of just observation in these remarks; but they appear to me an effect, rather than a cause. The Imperial Legislature clogged the act of Parliament authorizing the formation of the colony with injudicious restrictions; compelled a large quantity of land to be sold, and considerable sums of money to be raised *before the act became operative*. Instead of encouraging any body of Englishmen who would colonize the wastes of South Australia, obstacles

were interposed in their attempts to accomplish this most desirable object, which was attended with many formidable difficulties. The proceedings of the South Australian commissioners added to the embarrassments created by the act of Parliament; and, indeed, in some respects, they were the inevitable result of a primary error. *Twenty*, or even *twelve* shillings an acre for land, of which the very locality was unknown, was a most injurious perversion of a sound principle of selling *surveyed* lands at a moderate fixed price. The appointment of conflicting authority in the persons of a governor and a resident commissioner, the unfortunate selections made in Captain Hindmarsh and in Colonel Gawler as governors, and the wasteful expenditure of the latter, produced a climax which undoubtedly caused great distress, but from which arose a sounder system, on which the existing prosperity of this fine colony now rests.

The position of affairs is shown in the debate on the South Australian bill in parliament, on the 15th of March, 1841, when Lord Stanley stated that the colony had commenced on the principle of loans, had continued on a system of credit, its prosperity had been fictitious, and now the bubble was burst, and the full mischief which had been created had been discovered. The noble lord added, "he did not wish to enter into details, but when they saw that at the expiration of four years from the commencement of a colony there was an expenditure of £140,000 per annum, the revenue of the colony not being more than £20,000; that the government-house had been built at an expense of £24,000 on sanctioned authority; that £22,000 had been laid out in the formation of a road across a swamp for the purpose of improving a harbour originally badly chosen; that lands bought for 12s. an acre were sold in the hardly created town of Adelaide for £500, £1,000, or £1,500 an acre (a price hardly obtainable in Liverpool itself for an acre); that there had been established three banks carrying on business and issuing their own paper; that labour had reached the price of from 6s. to 12s. per day; that a body of police was established, paid at the rate of £1 19s. per week each man, who complained of the inadequacy of their wages, because they were unable to procure their white trousers and gloves to be washed for it—what, he asked, was the consequence of all this?—that there were not 200 acres of land in the colony actually under tillage for

the support of the colony, the whole of the colonists directed their attention to land-jobbing and speculation, and a profligate waste of money had taken place in a manner utterly inconsistent with the success of the colony."

Captain Grey, late of the 83rd regiment, was appointed to succeed Lieutenant-Colonel Gawler. This officer carried off high literary honours at the Military College of Sandhurst; in 1837-8-9, when a lieutenant, he voluntarily undertook, in company with Lieutenant Lushington, of the 9th regiment of infantry, an expedition of discovery to the west and north-west coasts of Australia (see page 379). The talent and judgment evinced by Lieutenant Grey in this arduous pursuit of knowledge, the local information which he possessed of South Australia, and the comprehensive mind which was evident in his language and writings, made a strong impression on Lord John Russell, then secretary of state for the colonies, and induced his lordship to recommend to the Queen for the government of South Australia, a gentleman who, whether a soldier, sailor, or civilian, was evidently adapted for the responsible duties entrusted to his care.

On 19th March, 1841, the house of Commons temporarily voted £155,000 towards the liquidation of the bills drawn on the South Australian commissioners by Lieutenant-Colonel Gawler, which the commissioners had no funds to meet. Governor Grey arrived at Adelaide in May, 1841; he found the balance in the hands of the colonial treasurer only £700, and the anticipated expenditure for the *quarter*, £32,000, and about £3,000 remaining due from last quarter. At the same time, £35,000 of claims left unsettled by Governor Gawler were clamorously pressed upon Governor Grey for liquidation. The sales of land had all but ceased, the revenue was decreasing, the colonial establishments were unnecessarily large, and there were little or no funds to carry on the government. The South Australian Bank offered Governor Grey a loan of £10,000, at twelve per cent., on his personal security; this he properly declined—the crown property in the colony he was authorised by her Majesty's ministers to sell, but the derangement in the money market caused by the proceedings of Lieutenant-Colonel Gawler, rendered such a measure impossible; no alternative remained, but to postpone any attempt at liquidating the bills of his predecessor, until the issue

of the pending parliamentary inquiry should be known. Retrenchment was everywhere begun—the government works which could not be left half-finished, without the risk of dilapidation, were completed so far only as was absolutely necessary; the labourers, who had for eighteen months been employed at high wages, were urged to betake themselves to agricultural labour in the country, or if they did not, Governor Grey treated them, to the number of nearly 2,000 men, women, and children, as mere pauper emigrants, but allowed none to want the necessaries of life; by this means, the energies of the people were directed from unprofitable buildings in town, to lucrative tillage and pastoral pursuits. A sum of £3,000 was obtained as a loan from the New South Wales government; the Lords of the Treasury defrayed the cost of completing the requisite work on the public buildings, the pauper emigrants, and the police establishment.

In July, 1841, Governor Grey met the Legislative Council with reduced estimates, as follows:—

Reductions in	1841.	1842.
Survey and Land Department	£14,850	£3,635
Emigration	6,927	390
Storekeeper's	23,748	340
Police, mounted and foot . .	16,109	9,112
Customs department . . .	9,769	2,478
Harbour Master's "	3,944	1,612
Gaol	2,141	1,034
Port Lincoln	1,299	572
Total	78,787	19,173

There were also various minor reductions, and several useless offices abolished. The wages given by government to the emigrants were reduced from 1s. 6d. a day, with rations, to 1s. 2d. without rations, and they were withdrawn from Adelaide, and employed in making bridges and in opening lines of communication, such as the *Great Eastern road*, to the valuable Mount Barker district.

Her Majesty's secretary of state for the colonies and the lords of the treasury effectively supported the measures of Governor Grey, and, in a despatch of their lordships to Lord Stanley, of 26th April, 1842, they stated that, "the governor had acquitted himself in an able and satisfactory manner, of the important trust which had been placed in him."

During the administration of Governor Gawler, everything had a fictitious value;

a return to a sound state necessarily caused a rapid fall in the price of land and houses, and there were many bankruptcies. Nearly one-half the population of the province (8,500) had crowded into Adelaide, among whom had been spent, during the twelve months preceding the arrival of Governor Grey, about £150,000, which had been procured by drawing bills on the South Australian commissioners in England. This large sum was distributed in the form of salaries, allowances, and lucrative contracts. The whole population of South Australia was then less than 15,000 (14,061), who thus received, man, woman, and child, each £10. And although there was abundance of the richest land around ready for the plough, the immense sum of £277,000 was sent out of the colony during the year 1840, for the purchase of the necessaries of life.

The character of Governor Grey was manifested by the exercise of a wise statesmanship, and the firmness with which he resisted the clamorous demands made by tumultuous bodies of men using seditious language, and marching in organized array to government-house, threatening the representative of their sovereign, whom there was no military to protect. But these and other unjustifiable proceedings, did not prevent the governor contributing £400 in one year to charitable purposes, out of his limited income of £1,000; and to his honour it is recorded, that "real poverty and distressed merit never in vain sought relief."

In November, 1841, with a view to the relief of the colony, whose mercantile community was limited, Governor Grey drew upon the lords of the treasury for the amount of the bills which Colonel Gawler had drawn, but which were then dishonoured by their lordships. For this proceeding Governor Grey was slightly censured by the Secretary of State; in justification he alleged that Parliament had voted £155,000 to liquidate the dishonoured bills of Colonel Gawler.

Captain Frome, of the Royal Engineers, who had arrived in the colony with a small detachment of that excellent scientific corps, undertook to perform, gratuitously, the arduous duties of colonial engineer. Under the active superintendence of this able officer, the land surveys made rapid progress, and by the end of 1841, claimed special surveys of 4,000 acres each, to the number of thirty-five, were completed, and

306,000 acres were declared open for the selection of new immigrants. The cost of surveying was reduced from an almost unknown large sum, to 7½*d.* per acre.

The recommendations of the select committee of the house of Commons were not immediately carried out, owing to the change in the ministry; but on 5th July, 1842, Lord Stanley, her Majesty's secretary of state for the colonies, with his accustomed ability and clearness, laid fully before the legislature the state of South Australia, and of the liabilities incurred, which Mr. Dutton gives as follows:—

I. Parliamentary grant, advanced in 1841	£155,000
II. Bills of Lieutenant-Colonel Gawler remaining unpaid	27,290
III. Bills of Governor Grey, on account of emigrants maintained at the public expense	17,646
IV. Amount borrowed by South Australian Commissioners, bearing interest at 6 to 10 per cent. per annum	85,800
V. Outstanding debts of Lieutenant-Colonel Gawler's Government	35,000
VI. Amount borrowed from Land and Emigration Fund	84,697
Total	£405,433

This was an unfortunate illustration of what was termed the "self-supporting system of colonization;" in about four years the colony had incurred debts to the amount of £400,000, irrespective of its land sales and local revenues. Lord Stanley proposed to settle the debt of South Australia, thus:—I. (£155,000) To be made a free grant by parliament; II. and III. to be paid by the British treasury; IV. to remain as bonds with the holders, at an interest of three and-a-half per cent. guaranteed by her Majesty's government, and for which provision would be made out of the consolidated fund; V. and VI., to be covered by debentures issued in South Australia bearing interest not exceeding five per cent. His lordship also proposed to insert a sum of £15,000 in the estimates, to aid in carrying on the local government in 1842. The resolutions of the noble lord were agreed to by a large majority, and an act "for the better government of the province of South Australia," was passed 15th July, 1842.

I cannot agree with Mr. Dutton, that Parliament could be expected to sanction the payment of the dishonoured drafts of Governor Gawler, or the renewed drafts of Governor Grey, and that no portion of them should have been entailed as a burden on

the colony. The question was one which it was utterly impossible to solve to the satisfaction of all parties—for, whether the penalty of Colonel Gawler's grievous improvidence was to be paid by the ruin of the colony, or averted by a heavy sacrifice at home, it would in either case be borne by the innocent. Her Majesty's government, in agreeing to pay upwards of £250,000 out of the taxes raised from the people of England, towards a debt which, although incurred by their representative, holding under their authority whose measure, whatever it may have been, he doubtless greatly exceeded—certainly evinced no desire to shrink from the responsibility which they had incurred in sanctioning the unwise selection of the Australian commissioners. The money, it must be remembered, had been actually spent (though in a manner most lavish and ill-timed) *in and for* the colony, and the public buildings therewith constructed, would eventually benefit the South Australians. The dishonouring of the bills drawn by Governor Grey in payment of Lieutenant-Colonel Gawler's expenditure at Adelaide, necessarily increased the financial difficulties of the colonial government; Governor Grey was obliged to borrow £1,800 from the commissariat chest; during 1842, 136 writs were passed through the sheriff's court at Adelaide, thirty-seven fiats of insolvency were issued, and out of 1,915 houses built in Adelaide, 642 were found, in December, 1842, *totally deserted*, their inhabitants having proceeded into the country to labour in raising the means of subsistence from the fertile interior, where ploughs and harrows were in great demand.

At the beginning of 1843 every able-bodied man was at work on his own account; the harvest was so abundant, that there were not sufficient hands to reap it, and the soldiers and government *employés* were permitted to aid the farmers in securing the real wealth of the colony. The revenue began to improve; the exorbitant port dues which had been levied by Governor Grey to increase the "ways and means," were abolished, and the *post road* which had been constructed by the South Australian Company, at an expense of £13,400, under an agreement with Governor Gawler, that twelve per cent. interest was to be paid on the capital expended, by the colonial government, or that a toll might be levied, was compounded for by Governor Grey giving the company authority to select 12,000

acres of land out of the surveyed districts, in full of all claims on this account. The land sales were, however, checked partly by the distressed state of the colony, and partly by the operation of an act passed by the Imperial Legislature, 22nd June, 1842, "for regulating the sale of waste lands in the Australian colonies and New Zealand," which enacted that all lands should, in future, be disposed of by public auction at the minimum price of 20s. per acre, except blocks of 20,000 acres, of which the price should not exceed 20s. per acre. Under this act, *half* (not all) the proceeds of the land sales were to be applied to emigration purposes.

In 1843 the whole of the land sales in South Australia amounted to only 598 acres; the proceeds, to £613 13s. 9d., and but for a discovery then made, the colony would have had to maintain a long and difficult struggle against the enhanced price of land. Among the eighty-acre sections sold in 1843, there was one on the river Light which was found to contain rich copper ore; a discovery which led to further researches, and gave a stimulus to the enterprise and industry of the colonists, which has ever since continued, and has been the means of greatly enriching South Australia. The circumstances connected with this important epoch in the history of the province deserve detailed notice.

For several years after our occupation of the province of South Australia, no suspicion was entertained of the mineral riches to be found there, and the crown unreservedly granted, in fee simple, the ground and everything beneath it. Up to 1843, more than 300,000 acres of land had been surveyed and appropriated, and 300,000 more were surveyed and open to selection; but no one noticed the copper and lead which were nevertheless "cropping out" on the surface in so many places. During the latter part of the year 1842, a son of Captain Bagot, while gathering wild flowers in the plain, found and conveyed to his father a fine specimen of the green carbonate of copper. Fortunately for the colony, an intelligent settler named Dutton, to whose interesting work, entitled "*South Australia and its Mines*," I am materially indebted for details concerning its early history, had been educated at the institute of M. de Feltenberg, at Hofwyl, in Switzerland, where during the annual pedestrian tours of the pupils, he had acquired some knowledge of

mineralogy. One day, when in search of one of his flocks of sheep which had dispersed during a thunder-storm, he ascended a hill to obtain a view of the surrounding country, and, if possible, find his sheep. Wet, weary, and cold, from having been out all day, he pulled up his horse beside a rock which, at first sight, he supposed to be covered with a beautiful green moss. The habit acquired in Switzerland, of examining any rocks or stones which presented a curious appearance, induced Mr. Dutton to dismount, when he found a large protruding mass of clay slate strongly tinged and impregnated with a mineral which he supposed must be copper, from the close resemblance of the colour to verdigris. Mr. Dutton being on intimate terms with Captain Bagot, communicated his discovery to him, and the value of the mineral found by the young florist on the plain, and by the sheep farmer on the adjacent hill (Kapunda), was soon ascertained.

Captain Bagot and Mr. Dutton kept their own counsel; got a section of eighty acres surveyed, which according to the then land regulations, was advertised for a month in the government gazette; they then became the fortunate purchasers, at the fixed government price of £1 per acre, although there were a number of "eighty-acre land orders" previously granted to individuals in the colony, who might have selected this section. What the marketable value of this tract may now be, it would be difficult to say; in April, 1845, Captain Bagot and Mr. Dutton bought another lot of 100 acres, adjoining their original purchase, which they found contained rich lodes of copper ore; but on this occasion, instead of buying the 100 acres for £100, it cost them, after a sharp contest by public auction, £2,120. The great value of the ores soon became known, and the eighty-acre section containing the Montacute copper mines, put up for auction by government at £80, sold for £1,550. The Kapunda copper ores taken from the surface were sent to England, and found to yield twenty-three per cent. Some Cornish miners pursuing quietly agricultural pursuits in the colony, were soon engaged by the proprietors; and a place which a very few years since was a perfect wilderness, is now a thriving township, affording profitable employment to a considerable population.

The attention of all classes was now directed to geological and mineralogical know-

ledge; but the overseers, herdsmen, and shepherds, who frequently could not find anything but a piece of metallic ore to throw at a stray beast, were the principal discoverers of the valuable minerals which lay everywhere exposed to the most ordinary observation.

The *Montacute* copper mine, distant ten miles from Adelaide, was discovered by Mr. Andrew Henderson, overseer to Mr. Fortnum, while in search of a lost bullock. Mr. Henderson, when ascending a spur of the Mount Lofty range, remarked the green colour of a perpendicular cliff, broke off a piece, and conveyed it to Mr. Fortnum, who, from his chemical and mineralogical knowledge, instantly recognised the specimen as a rich copper ore.

Messrs. Fortnum and Henderson did not keep their secret; and when the government had surveyed the eighty acres required, and the section was brought to sale (16th February, 1844,) under Lord Stanley's regulations, instead of £80, the purchasers had to pay £1,500. In a few hours after the sale, however, they sold thirty hundredth parts for the cost of the whole, in £50 shares, to a mining company.

Mr. G. F. Angas has also had the good fortune (which he richly deserved, for his unceasing efforts to benefit South Australia,) to discover valuable mineral treasures in his extensive property, and has leased the mines on advantageous terms to mining associations.

Furnaces for smelting the ores of copper and lead, and refineries for separating silver from the argentiferous ores, have been erected near the different mines; and works which will cost £70,000 are now in course of construction near the Burra-Burra mines. Copper and lead ores will be smelted on the spot, rolled, and shipped direct to the available markets of India and China.

In consequence of the mineral riches contained in the province, the sale of land, which in 1843 was at a very low ebb, has since that date considerably increased. Two special surveys, of 20,000 acres each, have been demanded, and the purchasers paid £40,000 for the same. The Kapunda mining land yielded £3,008; the *Montacute*, £1,550. The Burra-Burra territory cost the original proprietors £11,000. The total amount paid for mineral lands, from 1843 to 1847, was about £70,000. A sale of the crown lands surrounding the Kapunda mine, realized for the first section of eighty acres £7,100, or about £90 an acre, another

section brought £80; others, £20 to £30; the total (2,804 acres) yielded £30,081.

But these proceedings were not mere wild speculations. Messrs. Bagot and Dutton, who bought the first eighty-acre mineral section (copper) at Kapunda, for £80, subsequently refused, in London, £27,000 for their land; and they have from the commencement worked entirely on the ores, without risk, and without the advance of a shilling being required from the proprietors. The first lead ore sent (in 1841) from Adelaide to England sold for twelve guineas a ton. The different ores raised in South Australia probably exceed in value one million sterling; and the amount is annually increasing. Agricultural as well as pastoral pursuits have not been neglected; but have flourished, by means of the wealth derived from the mines.

The subsequent chapters will show the progress of the colony, when the revenue began to exceed the expenditure, and the exports the imports; the extension of cultivation; and the augmentation of wealth.

Governor Grey remained long enough at Adelaide to witness a pleasing change in the feelings and language of the inhabitants towards him; and when, in 1845, her Majesty's government resolved to confide the administration of affairs in New Zealand to his proved judgment, his excellency quitted the scene of his difficulties, and of his triumphs, with the esteem and heartfelt gratitude of those he had so efficiently governed.

The task of his successors has been comparatively an easy one. Governor Grey was succeeded, in 1845, by Major Holt Robe, of her Majesty's 87th regiment, late military secretary at Gibraltar; and Major Robe, in 1848, by Sir H. E. F. Young, who filled with credit to himself for several years the post of secretary to the government of British Guyana, was next appointed lieutenant-governor of Eastern Africa, from whence he was removed to the responsible position of lieutenant-governor of South Australia, which station he now occupies.

The facts contained in the previous pages go far to show that South Australia cannot fairly be quoted as an argument either for or against the system adopted in its formation; since the leading causes both of its past disastrous and present successful state, viz., the improvidence of Colonel Gawler, and the discovery of its readily available mineral stores, were equally unforeseen by the founders of the colony. [See Supp^t.

CHAPTER II.

POSITION, AREA, PHYSICAL FEATURES—COAST LINE—HARBOURS, MOUNTAINS, RIVERS, AND LAKES—GEOLOGY, MINERALOGY, AND SOIL—CLIMATE AND SALUBRITY.

THE province of South Australia is situated between 132° and 141° E. long., and extends from the sea coast on the south, inland, to the twenty-sixth parallel of latitude. The area comprised within these limits is estimated at 300,000 square miles, or 192,000,000 acres, being more than double the dimensions of the British isles. Of this extensive territory, the greater part is, if not totally unexplored, at least very imperfectly known. According to a recent local authority, the only portions which have as yet been examined are, the peninsula formed by St. Vincent's gulf, on the west, and Lake Victoria or Alexandrina and the Murray, on the east; the western boundary extending from Cape Jervis to the great bend of the Murray, in 34° S. lat.; Yorke peninsula, between the Gulfs of Spencer and St. Vincent, and the peninsula of Eyria, the boundaries of which extend from Sleaford bay, in a northern and eastern direction as far as the head of Spencer's gulf, and in a northern and western direction as far as Streaky bay; the latter of these tracts have been, however, but very imperfectly examined.

South Australia, though it has not the grandeur imparted to the adjacent colony of Port Phillip, by the lofty summits of the Australian Alps, possesses, nevertheless, much picturesque scenery; and its only serious defect, the want of navigable rivers, is in great measure remedied by the accessible nature of the country.

COAST LINE.—The sea-board of this province, roughly estimated at about 1,500 miles, trends in a general south-east direction from the 132^{nd} meridian, which falls on the coast a little to the westward of Cape Adieu, to the 141^{st} meridian, a short distance eastward of Cape Northumberland, and is, throughout its whole length, indented with numerous deep and extensive bays, (besides the two great Gulfs of Spencer and St. Vincent), which though as yet very imperfectly known, are supposed to be, with few exceptions, the resort of the whale during the rainy season. Like most of the sea-coasts of this hemisphere, that of South Australia is bordered by many small islands,

few of which are of any considerable size, Kangaroo island being the chief exception, and rocks, reefs, and shoals, frequently render the entrances to the inlets intricate or dangerous, to a great extent neutralizing the advantages presented by the indentations of the coast, whose leading features we now proceed to notice.

Tracing the sea-line in the direction in which we have before stated that it trends, the first haven met with is *Fowler's Bay*, which, though it affords but indifferent shelter, is valuable from being the only harbour for several hundred miles; the dangerous nature of the shores to the east of the province being rendered yet more hazardous, by the strong current which sets into the Great Australian Bight. The anchorage is good, and although it is open to three points of the compass, it is evident, from plants growing close to the water-side, that a swell capable of injuring a vessel at anchor is seldom, if ever, thrown into it. Between Fowler's bay and Point Bell, the coast is moderately elevated, but barren and sandy; it is broken into three sandy bights, separated from each other by rocky projections.

Nuyt's Archipelago is situated in the extensive curve of the main coast between Points Bell and Westall, which comprehends several deep bays. The principal islands of this Archipelago are those of St. Peter and St. Francis, of the former, the most considerable, is low and sandy, about six miles in length and three or four broad. On it is a well dug by a sealer, who lived there many months. The shore abreast of it is of the same character, and connected with it by a shoal and some dry rocks, whence the shore trends round to the north and west, towards *Point Peter*, and forms—

Denial Bay, a good harbour, said to afford great facilities for whale fishing. Round the north side of Point Peter is a small boat harbour, with four fathoms at its entrance; but this depth rapidly decreases, and the creek terminates in an extensive morass.

The Isles of St. Francis are eleven in

number, they compose the south-westernmost group of Nuyt's Archipelago; but one only of them, situated in the middle of the cluster, is of any considerable size; it bears the name of the whole. *Isle St. Francis* is about three miles in length, and about half-a-mile across, near the middle, which is a sandy isthmus, connecting the moderately high and cliffy extremes, whose breadth is from one-and-a-half to two miles. The dark brown birds called sooty petrels, abound here, and a large bird called the barnacle goose, occasionally frequents the island.

Smoky Bay is six or seven leagues across, but very shoal and dangerous of entrance, being much exposed to the south and west. *Point Brown*, its eastern extremity, is a low sandy projection, in $32^{\circ} 37'$ S. lat., $138^{\circ} 48'$ E. long., between which and *Cape Bauer* a cliffy headland, extending four or five miles into the sea, is the low sandy shore of *Streaky Bay*, a beautiful and extensive harbour, which obtained its name from its inner portion being filled with light-coloured, streaky water, bearing on its surface much refuse from the shore, and sea-weed. Whales are very numerous in this bay, and oysters are procured here in immense numbers, and of excellent flavour. At the distance of four or five miles from Cape Bauer lies *Olive's Isle*, the south-east of Nuyt's Archipelago; it is low, about three miles in circumference, and surrounded by breakers.

Point Westall is somewhat higher than Cape Bauer; the space between them is occupied by a bight, skirted by a sandy beach, and open to the westward, which received from the French, who, it will be remembered, explored about 100 miles of this coast, the name of *Corvisart Bay*.

Cape Radstock, a bold projection, in $32^{\circ} 12'$ S. lat., $134^{\circ} 15'$ E. long., forms the southern extremity of a range of limestone cliffs, that line the shore for about six miles to the north-west; from thence to Point Weyland a large body of water runs parallel to the coast, having an entrance at both points.

The *Investigator's Isles* lie off this portion of the sea line. *Flinders' Island*, the largest and most central, is in shape nearly a square, each side of which is from three to five miles in length, with rocks projecting from the intermediate points. Bights are formed on the four sides; but the northernmost alone appeared to afford good anchorage. The island, according to Captain Lee, is covered with wood, possesses plenty of fresh water, and is admirably adapted for a whaling sta-

tion. Flinders, who discovered it, gives a different and almost contradictory account of its capabilities; for he states that no fresh water could be found, nor could fire-wood, even of very small size, be procured without difficulty; yet it was frequented by hair seals, sooty petrels, and small kangaroos; and at a former season, probably during the spring, had been visited by geese.

Waldegrave Isle, the most easterly of Investigator's group, lies close to the main land. *Anxious Bay* is situated between it and *Cape Radstock*.

Proceeding in a south-easterly direction, the next feature worth noticing is *Coffin Bay*, a whaling station of some importance. It is rather an inlet than a bay, and stretches so far into the land as to approach within sixteen miles of *Boston Bay*, which lies nearly opposite to it, on the eastern side of Flinders Peninsula. It is seven or eight miles across, and is well sheltered from all winds, save from north to east; but, unfortunately, a great portion of it is rendered useless by the shallowness of the water. The inner portion of the bay, however, is said to contain two or three secure harbours, with excellent anchorage. About two miles distant from the sandy east shore of Coffin Bay is *Mount Greenly*, a well-wooded hill, which rises between 600 and 800 feet above the level of the sea, and is remarkable as being the first elevation of any importance marking the difficult and dangerous coast we have just been tracing. Mr. Cannan, who examined the coast, in 1840, as far as Fowler's Bay, says that there is no "rise that can be called a hill from Mount Barren to Mount Greenly," and speaks of the eternal limestone cliffs, and the scarcity of water and grass, along these shores.

To return, *Fowler's Bay* is sheltered on the south and west by a barren and sandy tongue of land, whose northern extremity is named *Point Sir Isaac* (in honour of Sir Isaac Coffin), and the western, *Point Whidbey*. To the east of the latter lies *Avoid Bay*, a large ill-sheltered inlet.

Point Avoid, the south-east head of Avoid bay, is low, and has two small rocky islets connected with it by a reef lying off from it to the extent of nearly three miles. These are the easternmost of *Whidbey's Isles*, which extend in a line nearly five leagues from Point Avoid, and are small but considerably elevated; the westernmost of the group is a cluster of small rocky lumps called the Four Hummocks.

Perforated Isle, the largest and nearly the central of Whidbey's group, is about a mile in length, and near its summit has an excavation through which the light is admitted on both sides. *Granby's Isles*, three small high islands, with a peak on the easternmost or largest, said to be visible ten leagues off in clear weather, lie fourteen or fifteen miles off Point Whidbey.

Cape Wiles is a steep cliffy head in $34^{\circ} 57'$ S. lat., $135^{\circ} 38' 30''$ E. long., with two high rocks and a lower one near it. *Liguanea Island* lies about three miles from the shore, is of moderate elevation, and about a mile and-a-half in length.

Sleaford Bay is seven or eight miles across, and about four in depth, but being quite unsheltered from the southerly swell that rolls in so frequently upon this part of the coast, is of comparatively little value. It is occasionally used as a whaling station. *Sleaford Mere* is a shallow lagoon about four miles long and one broad, situated two or three hundred yards from the sea beach of Sleaford Bay.

Cape Catastrophe, so called from a boat's crew belonging to H.M.S. *Investigator*, whose names were afterwards given by Flinders to the islands in Thorny Passage, having been lost in the strong tide rippings of this shore, marks the western side of the entrance to *Spencer's Gulf*. It has a round smooth summit, clothed with vegetation; three miles to the south of it lies *Williams Isle*.

We have now arrived at the deep gulf, which stretches into the land for nearly 300 miles, extending to $32^{\circ} 30'$ S. lat. It becomes quite narrow and shallow at the top, and appears at one time to have communicated with Lake Torrens. The extreme saltness of its waters throughout renders it only too probable that no fresh water stream of any importance disembogues within its limits.

The entrance of *Spencer's Gulf* is about fifty-five miles across, several islands are situated in it, of which, by far the most important, *Thistle Island** is about twelve miles in length, and from half-a-mile to two miles broad, affording good pasture for sheep.

* No fresh water could be found on this island by Captain Flinders, who explored it in 1802; he states that he found seals upon the beach, and further on numberless traces of the kangaroo. Signs of extinguished fire existed everywhere; but they bespoke a conflagration of the woods of remote date, rather than the habitual presence of men, and might have arisen from lightning, or from the friction of two trees in a strong wind. On their way up the hills a speckled yellow snake was met with asleep, measuring seven

Gambier Isles lie to the south-east of *Thistle Island*; the chief of them, *Wedge Island*, is so called from its wedge-like form. *Neptune Isles* are low, rocky, and surrounded by breakers.

Thorny Passage, formed between *Thistle Island* and the main, is from four to six miles wide. It obtained its name from the numerous small islands which contract its southern entrance so materially as to leave only about a mile-and-a-half of its breadth safe for ships, the depth there being twenty and twenty-two fathoms.

From *Cape Catastrophe* the shore of the gulf trends to the north, till on rounding *Cape Donnington*, in $34^{\circ} 44'$ S. lat., $135^{\circ} 57'$ E. long., the north harbour of *Port Lincoln* opens to view, with its three branches—*Spalding Cove*, *Port Lincoln proper*, and *Boston Bay*. This magnificent haven, from its great extent, and the number of its secure and sheltered anchorages, is capable of containing the largest fleets, and as a depôt can scarcely be surpassed by any port in the world. It is said strongly to resemble that of Rio Janeiro. The first object that strikes the eye is *Stanford hill*, on the summit of which is a white obelisk, erected to the memory of Flinders by Lady Franklin, marking the spot whence that celebrated navigator first beheld *Spencer's gulf*. At the entrance of *Boston bay* is *Boston island*, a hilly and romantic-looking spot, scattered here and there with casuarina trees, and clumps of various shrubs, and its shores indented by a succession of deep bays. It is uninhabited: only the solitary grave of an emigrant occupies a glen on that side of the island which looks towards the settlement from across the bay.† The anchorage in *Boston bay* is considered even safer and more accessible than that of *Port Lincoln proper*. The two channels of entrance into the bay, round the island, are practicable for vessels of the largest size, with any wind, or in any weather; for the harbour is so sheltered by the headlands forming the entrance, that the swell of the sea is broken before reaching it. The high ground which

feet nine inches, and on his return a white eagle, with fierce aspect, and outstretched wings, bounded towards them, but stopping short at twenty yards off, flew up into a tree. Another eagle discovered himself by making a motion to pounce upon them, evidently mistaking them for kangaroos. These birds sit watching in the trees, and should a kangaroo come out to feed in the day time, it is seized and torn to pieces.—*Flinders' Terra Australis*.

† *Savage Life*, by G. F. Angas.

almost surrounds Boston bay, protects it in like manner from the winds, more especially those from the west and south-west, in which directions some of the hills attain the height of several hundred feet. The depth of water in the central parts of the bay is about twelve fathoms, varying from five to seven, at the distance of less than a quarter of a mile from the shore all round; whilst at Boston point, where the town has been laid out, there is a depth of two, three, and four fathoms, at about a boat's length from the land. The bottom consists, in some places, of mud, in others, of shells and sand. The tide sometimes rises seven feet, but usually not more than five; this depends, however, on the outward state of the gulf, and the quarter from whence the wind is blowing. In the summer season, the land and sea breezes blow very regularly for three weeks or a month at a time. They are then succeeded by strong winds from the south-west, that last for three or four days, and are sometimes very violent. In winter, these interruptions to the usual calm state of the weather are more frequent, but the harbour is little influenced by them. (See Captain Sturt's *Account of South Australia in 1847.*) To the east and north-east of Port Lincoln are scattered numerous islands, known as Sir Joseph Banks' group, whose names and positions are sufficiently indicated on the map.

Our information respecting the shores of Spencer's gulf is too fragmentary to afford materials for any connected account. From Port Lincoln to Franklin harbour a succession of rocky bays occur, many of them with fine sandy beaches, and shelter for small craft. Short reefs run out from all their points; but outside of these, and generally between them, the water is deep, and apparently clear of dangers.

Franklin Harbour affords good and well-sheltered anchorage; it is the port at the entrance of *Lake Flinders*, a sheet of water eight miles in length, by two in breadth, the greater part being, however, very shallow, and surrounded by mangrove swamps. In 1846, the head of the gulf was examined by the lieutenant-governor, Colonel Robe, for the purpose of ascertaining an eligible place of shipment for the produce of the northernmost located part of the province. The chief result of his expedition was the discovery that that portion of the gulf there, about ten miles across, extending immediately north from *Point Lowly*, in $32^{\circ} 57'$

S. lat., to the latitude of Mount Remarkable, $32^{\circ} 43'$, contains a commodious harbour, well sheltered, and of easy access. A long sand spit, stretching from the point (not named) of the eastern coast, opposite to Point Lowly, dry at low water, shelters the anchorage from southerly winds.

Port Germein, situated about twelve miles south-east by east from Point Lowly, affords good shelter for small craft. The port is bordered by mangrove swamps. A sandstone hillock, called Benjamin's hill, marks the north-east side of the entrance, whilst at the south-west entrance is a low mangrove point, off which a broad sand-shoal extends for many miles into the gulf.

The eastern shores of Spencer's gulf, formed by *Yorke Peninsula*, are marked by *Port Victoria*, situated at the spot termed by Flinders Point Pearce, now occasionally called Wardong Island, in whose neighbourhood there are stated to be several safe and commodious anchorages: further to the south, and nearly opposite to Port Lincoln, is an extensive and well-sheltered inlet, called *Hardwicke Bay*. *Cape Spencer*, the extremity of Yorke peninsula, is in $35^{\circ} 17'$ S. lat., $136^{\circ} 52'$ E. long.; off it lies *Althorpe Island*, a rocky islet, frequented by innumerable sea-fowl, in Investigator's Strait.

The *Gulf of St. Vincent* is about half the size of Spencer's gulf, which it resembles in the swampy nature of the shallow water at the top, and the perfect saltness of the water where both shores unite. Kangaroo Island, which lies across its entrance, effectually protects it from the swell of the heavy southerly seas, and forms two wide and safe passages, the western being known as Investigator's Strait, the eastern as Backstairs Passage. The navigation of the gulf itself is throughout easy and perfectly free from hidden dangers. In Investigator's strait, on the southern coast of Yorke Peninsula, nearly midway between Cape Spencer and Troubridge Shoal, is an extensive bay, called *Sturt Bay*, which affords good and safe anchorage, for although open to the south and south-east, winds from these quarters, owing to the narrowness of the strait, do not raise a sea sufficient to impede a vessel in weighing anchor. The western shore of the bay is formed by a promontory of sand hills (from forty to fifty feet in height), clothed with grass and casuarina trees, terminating in *Point Davenport*, a flat rocky point which forms an effectual breakwater during south-west gales.

On the eastern coast of Yorke Peninsula, *i. e.* the western shore of St. Vincent's gulf, nearly opposite to Adelaide, is a good harbour, called *Port Vincent*. Between the head of St. Vincent's gulf, in about $34^{\circ} 30'$ S. lat., and Port Adelaide, its eastern shore is alternately lined with mangroves, or low and sandy, affording nevertheless several commodious havens for small craft. The most important of these is *Port Gawler*, an inlet or channel surrounded on either side by mangrove swamps, by which the little river Gawler enters the gulf. The next important inlet is that which contains *Torrens Island*, and terminates in the large creek on whose eastern bank Port Adelaide* is situated. From thence to Holdfast bay, which lies about fourteen miles to the southward, a sandy beach continues backed by sand hummocks, that conceal the nearer country, but are not high enough to impede the view of the summits of the Mount Lofty range, distant about eleven or twelve miles.

Holdfast Bay, behind which is the fertile and beautiful tract called Glenelg Plains, is not very appropriately named, being in fact an open roadstead, exposed to north-west, west, and south-west winds, which, when blowing hard, raise a short tumbling sea. The ground is a fine sand, almost covered with weeds, so that when the anchor once starts, the weeds being raked up under the crown, will in a great measure prevent its again holding. In the summer months it may be considered a perfectly safe anchorage, if due caution is exercised in giving the vessel cable in time.† About the middle of the bay is an inlet of the sea, on which boats can enter and discharge their cargoes at high water, but at low water they are obliged to unload on the beach, owing to a bar of sand at the entrance. The southern arm of the bay is formed by the termination of the range of hills running from the north. A few miles from this bay the coast becomes bold and rugged, and, excepting one small sandy bay, into which a fresh-water stream oozes, continues so to the outlet of the *Onkaparinga*, the largest river on this side the gulf. There is a bar at its entrance, over which boats can only pass at high water, and it is salt as far as the tide flows, about three miles. There is no anchorage at this part of the coast.

Noarlunga township is situated near the mouth of the *Onkaparinga*, to the south-

* For description of Port Adelaide, see city of Adelaide, in a subsequent page.

ward of which is a remarkable detached rock of a tabular form. Near this point some extensive gravel pits, with deep chasms and gullies, are very conspicuous; from these a gentle slope of nearly a mile runs along the coast into the plains, with an extensive beach of sand and shingle, forming a very narrow bay, called by Colonel Light *Deception Bay*. The scenery now becomes exceedingly diversified, dark cliffs and small sandy bays, with grassy slopes, almost to the water's edge, succeed each other, backed by moderate hills, sparingly covered with trees, and broken into numerous valleys. Thus passing *Aldinga Bay*, the outlets of several small streams, *Yankallilla Bay* and river, we arrive at a deep bay, protected on all sides by rocky mountains, and backed by a beautiful little valley surrounded by an amphitheatre of hills, richly covered with kangaroo grass, from which descends a small fresh-water stream, flowing through the valley between high banks, and abounding with fish. The hills here do not run in one continuous longitudinal range, as higher up the gulf, but to Cape Jervis, seven or eight miles southward, are thrown together as it were without any arrangement. They are covered, however, with good soil, are in many places well wooded, and enclose fertile valleys and rich openings, with numerous small streams. A rocky point, called by Captain Flinders, North-west High Bluff, forms the northern extremity of "Pat Bungar," a small but secure boat harbour, surrounded on all sides by low sloping hills. In the vicinity of *Rapid Bay* the cliffs in many places rise perpendicularly to a considerable height, and are veined with micaceous schist, or mica slate, with occasional veins of dolomite and other minerals. Copper ore has been found here. A few miles beyond is *Cape Jervis*, the projection which marks the eastern entrance to the gulf, whose shores (with the assistance of several authorities, but especially of the recent volumes of Sturt and Angas) we have now traced to their termination.

Kangaroo Island lies twelve miles south of Cape Jervis. Its length and area are differently estimated; but it is generally stated to be about seventy-eight miles, and thirty in breadth, with a superficies of 2,500,000 acres. The principal features of the land, as seen from the western coast, are swelling rounded hills, clothed with thick scrub, intermingled

† *Sailing Instructions for South Australia*, by Captain Lee.

with clumps of trees. Cliffs of a whitish colour, rising abruptly from the sea, attain in some places a height of 300 feet. Many romantic and sandy bays indent the southern coast, a long line of bold cliffs and rocky shores mark the north-western boundary. This extensive island is supposed by Mr. Menge to have been formerly connected with the mainland at Cape Jervis, and to have been separated by the ceaseless operation of the sea, which opinion is confirmed by the continuation of the mica slate formation all along its southern coast. Kangaroo island appears not long ago to have consisted of two islands, since joined by an accumulation of sand and lime at Lagoon bay. Limestone is continually accumulating around the coasts, and rests upon the primitive slate. This limestone contains, in a petrified state, the shells thrown out by the sea, and stumps of the indigenous woods, with their roots also petrified. Nine miles in the interior there are belts of iron and limestone running through the island, between which good arable soil is occasionally found.

The denseness of the vegetation prevents an accurate knowledge of the interior; it is supposed that considerably more than three-fourths of the surface is covered with brush-wood and dwarf gum trees; there is, however, large timber. Mr. W. H. Leigh measured one tree growing in the interior, and found it nineteen feet in girth, as high as he could reach, enormously lofty and umbrageous, and with others growing around it, as in an English wood; the minor plants and climbers which spring up at the roots of the forest timber, render exploration difficult, if not impossible. In several instances, where the land has been cleared, it has, however, yielded good returns, and quantities of the finest onions and other produce are now sent from Kingscote to Adelaide. The scarcity of good water, and the great difficulty of obtaining it, appears to be general throughout the island. The valleys running out to the north coast are filled with high timber, but there are some tracts of excellent soil along the table-land and in the drainages. Grass, however, is said to be scarce.

A chain of large lagoons extends from the head of Seal Bay over to Vivonne Bay; and from the Table Hill, twelve have been numbered, which, however, are mostly dry in summer.

Nepean Bay, on the north-east coast, in

35° 33' S., 137° 41' E., the chief feature of the island, is a large and excellent harbour, protected by a long sand-spit, which forms a perfect breakwater. The first colonists for South Australia landed at Nepean bay, and formed a settlement called *Kingscote*, on the slope of some hills overlooking the harbour. The soil was found to be poor, being composed of sand left by the retiring sea, and a small portion of vegetable mould. After considerable expense had been incurred by the South Australian Company, in erecting buildings and making roads, the settlers removed to the mainland. The climate is neither so warm in summer nor so cold in winter, as at Adelaide; but the gales of wind are heavier, and there is less rain, in general, than falls on the adjacent coast.

The island derives its name from the number of kangaroos seen by its discoverer, Flinders, who with his party, in a single day, killed thirty-one animals, the least weighing 69 lbs., and the largest, 105 lbs.; they were so unaccustomed to the sight of men, whom, says Flinders, they probably mistook for seals, that in some cases they allowed themselves to be knocked on the head with sticks. The kangaroo and the seal seemed to dwell amicably together among the bushes on the grassy flats near the shores of the island. Mr. Leigh was informed by a deserter from a ship, who had been on the island twenty years, that so numerous were the kangaroos at the period of his arrival, that himself and another deserter, with the aid of two dogs, killed 800 of these beautiful animals in one month. This wanton slaughter took place for the sake of their skins, which the deserters sold to the crews of vessels calling at the island for salt and seals. It is no wonder that this singular animal is now scarce on Kangaroo island. The wallaby, opossum, bandicoot, and guana, abound, and venomous snakes, four to six feet long, may be seen winding in all directions through the matted scrub; the common brown Norway rat overruns the island, as does also the wild cat. The lagoons contain numerous pelicans, and the poem of the "Pelican Island," is stated to have originated in its author reading Flinders' description of Pelican lagoon, near Nepean bay. Kangaroo island has been, for many years, the resort of runaway men from the whaling ships, and of various whalers and sealers, who lived a lawless life, and made occasional forays to the mainland, where

they kidnapped the native women, and conveyed them to their island homes. One European lived twenty-two years near Nepean bay, somewhat after the manner of Robinson Crusoe. His native wife killed the last emu on the island, some years before the arrival of the South Australian Company's settlers, in 1836. No inconsiderable traffic was carried on by these lawless wanderers, in skins of seal, wallaby, and peltry of different kinds, and in supplying ships with fine salt, which is obtainable in unlimited quantities from the lagoons, where the crystals are deposited by the solar evaporation of the sea-water.

The good houses which were built at Kingscote are falling to decay, since the abandonment of the island by their proprietors, the South Australian Company; but as the harbour is unquestionably excellent, and the site of the town pretty, it may, probably, eventually form an agreeable summer watering-place for the citizens of Adelaide, who desire change of air and sea-bathing.

The harbour, however, of American river, and also a small bay five miles to the south-east of it, are considered by some persons to present superior advantages for a seaport town, there being an abundance of water at both these places, of which there is a deficiency at Nepean bay,* and as good, if not better soil.

To return to the coast line of the mainland, which from Cape Jarvis trends in an easterly direction, forming the northern shore of *Backstairs Passage*, (in whose entrance lie three rocky islands, called the *Pages*,) and is marked by a line of hills, diminishing gradually towards *Encounter Bay*, the principal

* Mr. Robert Fisher, Dr. Slater, Mr. Osborne, and three other gentlemen, landed from the barque *Africaine*, Captain Duff, November 1st, 1836, near Morel's boat-harbour, between Capes Borda and Forbin, to travel overland to Nepean bay, whither the vessel in which they were passengers was bound, with emigrants to establish the colony of South Australia. The party were furnished with about two days' provisions, and six bottles of rum. They found the sun oppressively hot, the country hilly, and covered with dense prickly shrub, to penetrate which was very difficult; indeed they frequently had to chop their way through by means of a hatchet, which they fortunately had with them. The first three days of their travels they found fresh water plentiful, but after that time it was not obtainable. After nine days' perilous journeying and extreme hardships (for six days without water or food, except the flesh of half a dozen parroquets and the blood of a couple of sea gulls, shot during their excursion), Mr. Fisher, and three of his companions, reached the South Australian Company's settlement, at Port Nepean; Dr. Slater and Mr. Osborne were

scene of the shore whale fishery of South Australia. To this locality a degree of painful interest is attached from the dreadful disasters of which it has been the scene. The shore abounds in rocks and reefs, and the surf is represented by old captains as being worse than that at the Madras roads. The rollers rise to the height of fifteen or eighteen feet in one unbroken line as far as the eye can see, and as south winds prevail on this part of the Australian coast, it is only during the summer season, and after several days of northerly winds, that the sea subsides, and the roar of breakers moderates for a time. *Rosetta Head*, a lofty bluff, stretching out to seaward nearly at a right angle with the coast, forms the western side of Encounter bay. From its summit the whalers watch for their prey. Under the lee of Rosetta head is a small harbour also called *Rosetta*,† in honour of Mrs. Angas, which is separated by a rocky island named *Granite Island*, and a reef that is visible at low water, and connects Granite island with the mainland from Victor harbour. According to Captain Sturt, neither of these harbours are considered secure, although protected from all but south-east winds; and he mentions, on the authority of an experienced seaman, (whose name is not given) that under the lee of Freeman's Nob, and a small island off it, anchorage altogether preferable is to be found, as being more sheltered and having better holding ground. The capabilities of these harbours are however at present of comparatively little importance, but the rapid increase of colonization will probably soon render them of more immediate interest, and lead to their fuller examination.

unavoidably left behind, and both must have perished, as a party of native women and islanders sent in search of them were out sixteen days, but returned without succeeding in the object of their mission.

† It was in Rosetta harbour, during the early settlement of the colony, that the South Australian Company's ship, *South Australian*, was driven on shore and lost. The *John Pirie*, a strongly-built schooner, also belonging to the company, had well-nigh shared her fate. This little vessel was lying astern of the *Australian*, when she went ashore, with the reef close astern of her. In this fearful position her anchors began to drag, and her destruction appeared inevitable, when her commander, Captain Martin, determined on attempting to take her over the reef, it being high-water at the time. He accordingly cut his cable, set his sails, and ran his vessel on the rocks. Four times she struck, and was heaved as often over them, until at length she floated in the deeper water of Victor harbour, and found her safety under the lee of the very danger from which she had expected destruction.

At the eastern extremity of Encounter bay the junction of the Murray with the Southern Ocean takes place in 35° 32' S. lat., 138° 56' E. long. The aperture made by the impetuous stream in the dreary line of sand hills through which it forces its way is about a third of a mile in breadth, and when the river is flooded a strong current runs out of it with such rapidity, that the tide setting in at the same time, causes a short and bubbling sea. On its eastern side is a lake or lagoon called the *Goolwa*, (chiefly occupied by Hindmarsh island) which receives the waters of Finnis river and Currency creek. Lake Victoria is connected with Encounter bay by means of the channel of the Goolwa, now called *Port Pullen*, in compliment to the officer who by strenuous and persevering effort, succeeded in taking a small cutter through that narrow passage, and navigating her across Lake Victoria into the Murray river, as high as the settlement of Moorundi. Although the name of Port Pullen records a daring and successful enterprise, yet many melancholy associations are connected with this spot. Some years before, Sir John Jeffcott, the first judge of South Australia, and Captain Blenkinsopp, with two of their boat's crew, found a watery grave in attempting to pass from the Goolwa into Encounter bay, and the large sand hill which marks the eastern shore, is named *Barker's Knoll*, in memory of the brave officer, who after having left his companions and succeeded in swimming across the mouth of the Murray, there fell a victim to the superstitious fears of the Milimendura natives.

Lake Victoria (originally called *Alexandrina*), is estimated at from fifty to sixty miles in length, and from thirty to forty in breadth. At seven miles from the entrance of the Murray, its waters are brackish, at twenty-one miles across, perfectly salt, the force of the tide being there perceptible. Although, when viewed from the point of Pomundi, which projects into it from the south, it has the appearance of a clear and open sea, yet it is, after all, exceedingly shallow; its medium depth is only four feet, and it is rapidly filling up from the decay of seaweed, and the deposits brought into it yearly from the Murray. "No doubt," says Captain Sturt, "but that future generations will see that fine sheet of water confined to a comparatively narrow bed, and pursuing its course through a rich and extensive plain. When that shall be the case," he adds "and that the strength of

the Murray shall be brought to bear on one point only, it is probable its sea-mouth will become navigable."

Two small streams named the *Bremer* and the *Angas*, flow into Lake Victoria, which communicates at its south-eastern extremity with another lake, named *Lake Albert*, of about fifty miles in circumference, with a depth varying from four to ten feet. The water in Lake Albert is in some parts very good, in others, slightly brackish, but quite fit for use. From the sea-mouth of the Murray, a sandy coast, completely open to the ocean, stretches away to the south-east, forming the outer shore or sand-hills of the *Coorong*, a back-water of Lake Victoria and the Murray, which runs parallel with the sea for a distance of ninety miles, separated only by a ridge of sand-hills, some of which are from 300 to 400 feet in height, with a breadth varying from half-a-mile to a mile and-a-half. Its waters are salt; its average breadth about two miles. The inner shores (which appear to have been originally the boundary of the ocean) are broken with numerous rocky promontories, and shallow sandy bays indent its margin; towards the sea, the hills of sand rise in stupendous masses, forming a long and dreary peninsula, against which the surf of the southern ocean beats with unceasing violence. In some places the sand is so white, as to resemble snow, and contrasts strongly with the shrubs growing on these hills, which are of deep green. The *Coorong* terminates in a series of salt lagoons, after passing successive swamps intersected by belts of grassy soil and low hills, scattered over with casuarina and a variety of smaller shrubs; near its eastern extremity, a stream called *Salt Creek*, flows out of it, running through the desert country to the eastward. The *Coorong* is the resort of myriads of waterfowl, which in some places are so numerous, as to darken its surface; black swans, pelicans, ducks, teal, and shags, breed in perfect security amid its profound solitudes. Shellfish and mullet abound in its waters, and the montery, or native apple, grows in every direction over the bleak and desolate mountains of sand that form a barrier from the fury of the ocean.*

The termination of the *Coorong* is marked by a low granite range constituting a watershed, throwing the drainage to the north and south, respectively; from the shore a protruding mass of granite, about twenty

* *Australia Illustrated*, by G. F. Angas.

or twenty-five feet high, forms a bold point in a long, straight line of coast, and was mistaken for a cape by M. Baudin, who called it *Cape Morad-de-Galles*. This rock projects but a few feet; there is, however, from this point, a sunken granite reef jutting into the sea, apparently connected with the rocks that break the water in Lacépède bay, an inlet immediately beyond, which, it is supposed, will be found to afford sheltered anchorage to small vessels, even in the winter season.

From *Cape Bernouilli*, or *Jaffa*, a remarkable projection to the south of Lacépède Bay, reefs extend for a considerable distance. Many disastrous shipwrecks have occurred in its vicinity; among them, that of the *Maria*, whose unhappy passengers and crew—such of them, at least, as escaped the perils of the sea—met a yet more melancholy death; for after toiling along the dreary shores of the Coorong, under a burning sun, for nearly ninety miles, they were ruthlessly massacred by the Milmendura natives.

From Cape Bernouilli a ledge of rocks extends for ten or twelve miles towards *Godfrey Island*, which lies in the centre of *Guichen Bay*, a valuable outlet for the province, and a much-needed port of refuge, affording good anchorage, safe during every wind. From its south point (Cape Dombey) a ridge of rocks extends, which serves as a breakwater for the outside swell. A township was laid out here, in 1846, called Robe Town; and another, named Grey Town, was formed at Rivoli bay, about the same time. The shores between these bays are bordered by lakes or lagoons; which, however, do not communicate with the sea. The first of these—the nearest, that is, to Guichen Bay—named *Lake Hawdon*, cannot rightly be called a lake, being merely a flat swampy plain, which in the rainy season is covered with water. *Lake Eliza* and *Lake George*, both of considerable size, are separated from each other only by a narrow strip of land.

Rivoli Bay is a good haven, but, from its exposure to south-west winds, is not considered to afford proper shelter for square-rigged vessels. *Penguin Island*, so named from the vast number of penguins found there, lies off *Cape Martin*, the northern extremity of Rivoli bay; the southern, *Cape Lannes*, is, I believe, identical with the *Cape Buffon* of the French.

Immediately behind Cape Lannes, *Lake Frome* stretches southward towards *Lake Bon-*

ney, a very extensive sheet of water, divided from the sea by a line of sand-hills.

Destaing Bay lies to the south of Lake Bonney; from thence the coast trends in a south-easterly direction to *Cape Northumberland*, in $38^{\circ} 4' \text{ S. lat.}$, $140^{\circ} 42' 33'' \text{ E. long.}$, when it turns to the east, presenting no feature worthy of notice between that point and its termination, a little to the westward of the mouth of the Glenelg.

MOUNTAINS.—Although the province of South Australia contains several continuous ranges of high land, it has none of any great elevation, the loftiest not much exceeding 3,000 feet. The *Mount Lofty range* stretches from Cape Jervis, along the east shore of Gulf St. Vincent, to the northward for about forty miles, there attaining an elevation of 2,334 feet. From this point a chain branches off to the westward, but the main range continues to run up towards the interior, into which Captain Sturt considers that it cannot extend far, or he must have seen something of it during his interior exploration. Captain Frome, in the map accompanying the account of his expedition of 1842, clearly connects it with the ranges traced by Eyre to their termination in Mount Hopeless, within the limits encircled by Lake Torrens, and speaks of the direction of what he terms “the dividing ridge between the basin of the Murray and the interior or desert plain, as generally about north-east from the highest point north of *Mount Bryan* (the *Black Rock Hills*, in about $32^{\circ} 45' \text{ S. lat.}$), gradually decreasing in elevation, and, if possible, increasing in barrenness.” The summits of these hills were found to be invariably rock, generally sandstone; the lower slopes covered with dense brush, and the valleys with low scrub, with occasional small patches of thin wiry grass. At the highest points of elevation from Mount Bryan northward, igneous rocks, of basaltic character, exhibit rugged and fantastic outlines;—in about $31^{\circ} \text{ S. lat.}$ marked indications of volcanic action have been found, and several hollows resembling small craters of extinct volcanoes, near one of which a warm spring was discovered, temperature 76° Fahr. , atmosphere 54° .

The principal summits of this range, viz., the Razor Back, Mount Bryan (to the south of which is the great Burra-Burra mine), and the Black Rock Hill, rise to the height of 2,992, 3,012, and 2,750 feet respectively.

The more western branch of the chain, sometimes called *Flinders' range*, follows the

eastern side of the head of Spencer's gulf; thence it runs nearly parallel with the inner shore of Lake Torrens for a very considerable distance, its most northerly extremity being, according to Eyre, *Mount Hopeless*, a low haycock-like peak, in 29° 30' S. lat., beyond which he describes the horizon as presenting one low uninterrupted level; the hopeless nature of the adjacent country being too clearly evidenced by the existence of numerous brine-springs.

Mount Serle, a very prominent eminence, is situated about ninety miles to the south-west of Mount Hopeless. Mr. Eyre considered that it could not be less than 3,000 feet in height; but, from an accident which had occurred to his barometer, was unable to ascertain it with accuracy.

To the east of Mount Serle, and connected with the main range by low long spurs, is a ridge named *Mount Deception*, from the fallacious expectations raised by its height (which to all appearance could not be less than 3,000 feet), of finding permanent water in its vicinity. Its summit was found to be attainable only by winding along the steep and stony ridges leading round the deep gorges and ravines by which it is encircled.

The other principal peaks in Flinders' range are, *Mount Arden*, *Mount Brown*, and *Mount Remarkable*, so named by Captain Flinders. Mr. Eyre, speaking of Flinders' range between Mount Arden and Crystal Brook, a distance of about eighty miles, says that the character of the range varies but little. High, rocky, and barren, it rises abruptly from the level country at its base, the slopes to the westward being steep and precipitous, very hard, and ringing like metal when struck with a hammer. The hills have no other vegetation than prickly grass, and are in many instances so coated over with loose stones as to render their ascent, from the steepness of the declivity, dangerous, if not impossible.

To return to the Mount Lofty range, the high land between it and the Murray is ably described by Colonel Gawler, in his *Geographical Notes*, as the *Mount Barker*, or *Great Ironstone*, and the *Mount Wakefield* ranges; and although myself disposed to consider the whole, including that just described, as forming one great mountain mass, and not properly divisible into distinct formations, I yet give the following abstract of Colonel Gawler's statement, as affording valuable information on the subject.

The summit of Mount Barker itself, is

about twenty feet higher than Mount Lofty. This elevation, however, is only continued for about a mile in length, by from fifty to one hundred miles in width. Beyond these limits the ground on all sides drops suddenly for 800 feet, Mount Barker rising like an isolated hill from the great table-land beneath it. This table-land is about 1,600 feet above the level of the sea. It runs in a broad belt parallel to the Mount Lofty range; its surface, presenting beautiful undulations of lightly-wooded low hills and gentle valleys. At from ten to fifteen miles south-west of Mount Barker, it falls rather suddenly to about 1,200 feet, and becomes covered with a stringy bark forest. From ten to twenty further, in the same direction, sharp, precipitous ridges, some of them attaining an elevation of from 1,800 to 2,000 feet, cross it in different directions. Between these, still upon high table-land, are formed the rich valleys of the Myponga, the Upper Finnis, and other streams, flowing severally to the westward, eastward, and southward. Immediately afterwards, entering along the range, still to the south-west, huge branches strike off to the sea, and from heights of from 1,200 to 1,500 feet, fall precipitously into it, along the line of coast which extends from Mount Terrible, the southern boundary of the Aldingha Plains, to Yankalilla. Other large branches shoot off from Myponga to the eastward of south, and fall with a more gentle descent towards the great bend of the Lower Murray, in the neighbourhood of Currency creek.

Mount Wakefield can scarcely be considered as distinct from the Mount Barker range; it is rather a mighty disruption from its south-western extremity. Between the two, for twenty-five miles from Yankalilla, in Gulf St. Vincent, to the mouth of the Inman, in Encounter bay, runs a very lovely valley varying from about six to two miles in width, well watered, and rich in soil adapted for agriculture, and in herbage for pasturage. In this valley are situated *Division Hills*, which separate the waters flowing into Gulf St. Vincent from those falling into Lake Victoria and the Lower Murray. Their summits are clothed with pastures, and their height is not above 800 feet above the sea, while that of the precipitous mountains which bound the valleys to the north and south, is from 1,200 to nearly 2,000.

The summit of the Mount Lofty range is narrow; it seldom exceeds a quarter of a

mile in width; that of the Mount Barker range, on the contrary, maintains a breadth of from six to ten miles, and though hills and ridges frequently intersect it, their elevation above the general summit is small, as compared with its height above the level of the sea.

Between the summits and the great valleys at the base, both in the Mount Lofty and Mount Barker ranges, runs a belt frequently from three to four miles in width, of very thickset, narrow, and tortuous spurs. These form, at first sight, the greatest obstacles in the way of practicable roads; but, on a close research, good passes over them may almost everywhere be found. The small valleys between these spurs are often very rich and well watered. The lower slopes of all these mountain ranges are almost everywhere composed of slate, the surface above the slate being always grassy. The summit of Mount Lofty is capped with a highly ferruginous sandstone, and large portions of the Mount Barker range with a conglomerate of ironstone and angular pieces of quartz; upon both formations Colonel Gawler declares himself to have invariably found stringy bark, forest, or brush.*

The heights termed the *Barossa Range*, about thirty miles to the north-east of Adelaide, form an undulating hilly country, lightly wooded, comprising several rich and picturesque valleys. The *Keizerstuhl*, the highest point in the range, has a beautiful outline, and the stream called the Rhine flows northward, through the pretty town of Bethany, where the German colonists have located, and given the names of several places in their fatherland to the more distinguishing features in the country around. The *Belvedere*, *Heranian*, *Hawdon*, and other surrounding minor ranges, do not present any very prominent features, but they offer much pleasing scenery.

A considerable portion of the peninsula which forms the south-western shore of Spencer's gulf, is occupied by a mountainous table-land, about 1,300 feet above the level of the sea, whose surface is traversed by many short and narrow mountain ridges, from 300 to 700 feet in elevation above it. From *Mount Olinthus*, situated thirteen miles from Franklin harbour, which attains a height of 2,000 feet, the view is magnificent, embracing, to the north-west, the whole course of the table-land for twenty-five or

thirty miles, with many peaks at much greater distances; the north-east and east, *Middleback Mountain*, which is an offset from the table-land, the upper part of Spencer's gulf, with the mountains beyond it, and the coast further than Point Riley; to the south-east, Point Pearce and Wardang island; and to the south-west, the immense tracts of low undulating country, as far as *Mount Hill* (Flinders' *High Bluff*), an isolated peak about 1,500 feet high, forty-six miles north-north-east from Port Lincoln.†

Marble Range, about thirty miles north-west of Boston bay, rises abruptly, and when its steep sides of quartz receive the evening sun, it appears as if inlaid with diamonds. In the distance, to the north, another mountain range is visible, consisting of abrupt, lofty cones, the most remarkable of which, *Albert Peak*, is visible for a considerable distance. *Mounts Dutton* and *Greenly* are also seen to the west, beyond the Marble range, and the high sand-hills of Coffin's bay shut out the scene to the south.

To the north of Eyria Peninsula, between Mount Arden and Streaky bay, a singularly rugged and barren range, of about 2,000 feet in height, extends for a considerable distance. The succession of detached ridges forming *Gawler Range*, consists entirely of porphyritic granite, the front slopes exceedingly steep, and covered by small loose stones, and without either timber or shrubs. From the whole range, not a stream or water-course was found to emanate, the only water obtainable in its vicinity being afforded by the deposits left by very recent rains. The adjacent country is equally sterile and arid, the soil being in many places saline, with several salt lakes, but affording no indications of fresh water or springs.

Baxter Range, to the east of Gawler range, is high and rocky, rising abruptly out of the plains. It is distinctly visible from Mount Arden, from which it is about fifty miles distant. Its formation is entirely conglomerate, of rather a coarse description. Fresh water and good grass abound in its vicinity.‡

The country to the east and south of Lake Victoria is not marked by a coast range of mountains, running parallel to the Pacific like the "Blue Mountains" of New South Wales; there are, indeed, only a few eminences, that appear to be continuations of the parallel ridges which mark the Australian formations, and, so far as we know

* Colonel Gawler's *Geographical Notes*. † *Ibid*.

‡ *Eyre's Expeditions into Australia* 1841.

throughout the whole island-continent have generally a direction from south to north.

Mount Benson, a round-topped eminence, with an elevation of 700 feet above the sea, is the highest of a range of limestone hills visible from the sand hills at Lacépède bay. The view from the summit is that of "a sea of woods," with the blue plains melting away into the invisible distance.

Mounts Gambier and *Schanck*, eight miles apart, at a short distance from the coast, near Glenelg river, are volcanic cones. *Mount Schanck*, the nearest to the sea, rises at an angle of about 45° for 600 feet, from a comparatively level country, and attains an altitude of nearly 900 feet above the ocean. The interior of the mountain is one vast hollow basin, upwards of two miles in circumference, and so deep that the trees growing in the rich soil of the lower depths of the crater, appear like minute shrubs dotted over its surface. The outer side of the cone is clothed with grass, scattered over with "she oak" trees. The rim or outer edge of the crater is stated by Mr. Angas to be not more than a couple of yards in breadth. Mr. Burr says there are three distinct craters; the principal one is 500 yards in diameter; another to the east about one-third as high as the principal, and 200 yards across; and a third crater to the south is rather more elevated than the east, and 250 yards wide. The small craters are on the slope of the main crater, nearly circular, devoid of water, and covered with rich vegetation on the inner and outer slopes. The view from the rim of the main crater is very extensive, commanding the windings of the Glenelg river and the curves of Bridgewater and Discovery bays in Victoria province. At the base of the mountain to the north there are circular limestone basins, and the country around presents heaps of black cellular lava. To the south-east and south-west there is a large mass of cellular wacke, forming a wall six to eight feet in height, and appearing as if it had at one time formed a sea beach. Governor Grey and his party, when riding round the foot of the mountain, noticed particularly to the south-east a hollow sound, as if there were a vault beneath them.

Mount Gambier is rather higher than *Mount Schanck*, of an oval form, 600 yards long, by 120 yards broad, the largest diameter in a direction nearly east-south-east. Mr. Angas says, the foot of the mountain exhibits the walls of three distinct craters, each containing a lake of water. Mr. Burr

states, that about one-third of the east portion of the crater forms a lake with high perpendicular cliffs, except to the west, where it is bounded by a gently sloping hill running nearly north and south across the crater, and dividing it into nearly two equal portions. The western portion of the crater has several lagoons, which contain water. The depth of the central lake of the crater is very great, the water good, and frequented by numerous wild ducks.

Mr. Angas expresses his "rapturous admiration of the glorious and enchanting scene," which the sudden view of the largest crater presented, when he reached the summit of the mountain; a vast hollow basin was, as it were, shut out from the world by the walls of lava that surrounded it, and covered with emerald verdure, burnished to a bright metallic green by the golden tints of evening; small hills, like miniature craters, interspersed among plains and valleys, carpeted with grass of velvet smoothness, scattered with a few blackwood or mimosa trees, form one portion of this enchanting dell. At its western extremity, terrace above terrace rises along the sides of the mountain, with occasional caverns of red lava. The deep, still lake, with its black-looking waters, is surrounded by lofty cliffs of pure white coral. The country between the two mountains is very rich, and the scenery beautiful.

Governor Grey discovered at the foot of *Mount Schanck* several caves containing numerous organic remains, with bones of the emu, gigantic species of kangaroo, and a tooth which must have belonged to a marsupial animal of gigantic size.

A low ridge to the north-west connects *Mount Gambier* with the *Mount Burr range*, which has an elevation of about 1,600 feet, and is generally steep to the south-south-west and west; but on the opposite side the ascent is very gradual. The country around appears to be of the most promising description for the settler.

RIVERS.—There are but few streams within the limits of South Australia which deserve the name of rivers, either from the length of their course or the body of water they contain, by far the larger portion being for the greater part of the year merely chains of ponds. Their channels however are generally of considerable depth; and though frequently almost dry in the hot season, a mighty flood rushes along during winter; as is shown by the residue of sticks, scum,

and grass, left in the branches of the gum trees that line their course, for many feet above the supposed ordinary height of the stream. Nevertheless the province is by no means so deficient in its supply of water as is frequently supposed, for even after its streams have almost or quite ceased running, abundance remains in the pools, many of which from their temperature and other causes, appear to be supplied by springs and under-currents. Even in places where no surface-water can be found, wells may be sunk, as good water is almost invariably found at depths varying from eighteen to sixty or eighty feet. The absence of surface-water is however naturally looked upon as a serious defect, and at Port Adelaide was doubtless the chief reason for which the town was built away from the harbour; but a well has lately been dug within 100 yards of high-water mark, where, at a depth of only a few feet, excellent water has been obtained in sufficient quantity for the uses of the whole population, and the shipping which frequent the port.*

The one striking exception to the usual insignificant character of the South Australian rivers is formed by the noble *Murray*, the upper portion of whose course, under the denomination of the *Hume*, we have already traced to its junction of the Murrumbidgee, river (see pages 585 and 586). From thence to the confluence of the *Darling* the Murray passes through a barren and unpromising country, where, excepting on its immediate banks, neither water nor food can be obtained. Boundless plains of sandy soil, covered with salsolacæ, extend to the north and south, alternating with brush and forest land. A little below the *Darling* (on the left bank of the Murray) a succession of lagoons occur, backing flats of considerable extent, clothed with nutritious herbage, but the plains to the northward preserve the same sandy and barren character for many miles. On the right bank of the Murray is the junction of the ana-branch or ancient channel of the *Darling*, and on the same bank, more to the eastward, are two lakes (*Victoria* and *Bonney*), situated a few miles from the left bank of the Murray,† whose surplus waters they receive by means of their respective channels, the *Rufus* and the *Hawker*. By this distribution of its waters the floods of the Murray are prevented from being ex-

cessive, or rising above a certain height. Between the lakes above mentioned, and especially in the vicinity of a little sandy peak named Mount Misery, the country is described in very unfavourable terms, the river itself being flanked by high level plains on both sides, while cliffs of 100 or 120 feet in height, composed of clay and sand, rise above the stream, their faces presenting the appearance of fretwork, so deeply and delicately have they been grooved out by rains. The soil of this upper table-land is a ferruginous clay and sand. The vegetation is chiefly salsolaceous, with scattered tufts of grass.

In 34° 9' 56" S. lat., an extraordinary change takes place in the bed of the river; for at this point commences the great fossil formation, through which the Murray flows during the remainder of its course.

The following interesting particulars respecting the river and its singular channel, are given on the authority of Governor Gawler and Captain Sturt; the geological formation of the latter will be described in its proper place.

In 34° S. lat., the river makes the decided bend to the southward, commonly termed the Great Bend, angle, or elbow of the Murray, and from thence continues in a southerly direction to its entrance in Lake Victoria; its banks, meanwhile, being characterised by a broad line of scrub called the Murray belt, composed of a thick brush of slender trees, shrubs, and bushes. When the surface is sandy, the pine predominates; when otherwise, eucalypti, exocarpi, acacia, and a large variety of others, many of them very beautiful. On the western side of the bank this brush is generally from fifteen to twenty miles in breadth. On the same bank a stripe of open ground usually intervenes between the brush and the valley of the river, covered with grass and salsolacæ. North of the Great Bend, the brush almost wholly disappears, and the open ground spreads out into enormous plains, from sixty-five to eighty miles in length from north to south, and to the eastward extending to the limits of vision. If water could be procured, these plains, and the mountains which bound them, would be good sheep pastures.

The most remarkable feature of the surface of the great fossil formation, is its want of water-courses and water. Along the im-

ray, named the *Lindesay*, which has subsequently proved to be only an ana-branch of the Murray itself.

* Bennett's *South Australia*.

† At page 384 mention was made, on the authority of Captain Sturt, of a supposed tributary of the Mur-

mediate banks of the Murray, water has worked out deep gullies, but these are very short. Generally, the rain appears to lodge on its surface in very numerous shallow patches, and to be carried off by evaporation. The valley of the Murray, in its whole length,—*i. e.*, for about 200 miles—in South Australia, is a hollow cut through this great fossil formation, to nearly the depth of the level of the sea, so that the hills and cliffs of either bank rise sometimes close to the margin of the river, sometimes at distances of one or two miles from it, to an elevation of about 300 feet. The scenery is rendered peculiarly attractive by the bold outline of the cliffs, whose colour varies from a light shade of yellow to a deep ochre.

The valley itself, in its whole course, is from three-quarters of a mile to two miles in width—the more general width being about a mile and-a-quarter. The river flowing through it, is from 100 to 250 yards in width, the more general breadth being between 150 and 200. Immediately above its entrance into Lake Victoria, it is 170 yards wide, fresh, and very deep. The least depth that has been observed between the Great Bend and Pomunda (the western point marking the mouth of the river), was twelve feet; but such comparative shallows are very rare. The river varies, during this portion of its course, to depths of forty feet, retaining the latter for a long distance, before joining the lake. The deep water in general holds very close to the banks. The flow of the current is about a mile an hour, immediately above the Bend; from a mile to a mile and-three-quarters, for two-thirds of the distance, towards the mouth; and for the remaining third, about half-a-mile. The long lines of hills and cliffs which bound the Murray valley, maintain throughout a rough parallelism to each other, but the river scarcely ever preserves an equal course between them. It sweeps continually in magnificent reaches, from side to side, forming perpendicular cliffs wherever it strikes the hills, and encircling never-ceasing flats of from half-a-mile to four or five miles in length.

The formation of these flats is remarkable. It is evident, that at a very distant period, the whole breadth of the valley was covered by water. After this, by degrees, the current striking against a cliff, and flying off towards the opposite side of the valley, left between it and the cliff a bank of detritus. This bank, for some distance, has occupied the whole space between the

strong current and the cliff. Continuing onward, a back-water was formed between the detritus and the cliff, and the bank has been carried on in a long narrow stripe between the strong current on the one hand, and the back-water on the other, until the river, striking against the opposite cliff, and returning again, after a long sweep, to the side first alluded to, formed a great semicircular flat, with a stripe of detritus as an outer embankment between it and the strong current, and a large back-water lake in the centre of the flat, communicating with the river by a narrow channel at its lower extremity. These back-water lakes have been gradually filled by alluvial deposition; most of them are now above the level of the river, and are covered with a light but excellent soil. The soil of the detritus banks is of course inferior; it is composed of the lime and sand of the cliffs, with some vegetable alluvium. Wherever the flats are fully formed, the margins of the river and back-water lakes are mostly lined with very fine flooded gum-trees, and a considerable part of the remaining solid ground with the box-tree.

The order of the formation of these flats has been most regularly successive. Those at and above the Great Bend are perfectly formed; their detritus banks are nearly twenty feet above the level of the stream, and clothed with magnificent gum-trees of all ages, while reeds have nearly disappeared from the soil. Proceeding downwards, the detritus banks very gradually diminish in height, reeds become numerous, and gum-trees thinly scattered; until at length, in the lower part of the stream, trees disappear, and the flats become vast expanses of reeds; the last of them, that within four miles of Pomunda, retaining its long stripe of detritus bank, and its back-water lake, in such extensive dimensions, that navigators with the stream would mistake the back-water lake for the river.

Captain Sturt, describing the Lower Murray and the Upper Murray, or Hume, as one river, says, "the heads of its immediate tributaries extend from the thirty-sixth to the thirty-second parallel of latitude, and over two degrees of longitude; that is to say, from the 146th to the 148th meridian; but, independently of these, it receives the whole westerly drainage of the interior from the Darling downwards. Taking its windings into account, the length of the Murray cannot be less than from

1,300 to 1,500 miles. Its rise and fall are both gradual. It receives the first addition to its waters from the eastward, in the month of July, and rises at the rate of an inch a day until December, in which month it attains a height of about seventeen feet above its lowest or winter level. As it rises, it fills in succession all its lateral creeks and lagoons, and it ultimately lays many of its flats under water. The natives look to this periodical overflow of their river with as much anxiety as did ever or do now the Egyptians to the overflowing of the Nile. To both they are the bountiful dispensation of a beneficent Creator; for as the sacred stream rewards the husbandman with a double harvest, so does the Murray replenish the exhausted reservoirs of the poor children of the desert with numberless fish, and resuscitates myriads of crayfish that had long lain dormant underground; without which supply of food, and the flocks of wild fowl that at the same time cover the creeks and lagoons, it is more than probable the first navigators of the Murray would not have heard a human voice along its banks."

As a line of communication between distant colonies, the Murray is of great and indisputable importance. Captain Sturt considers that, as a commercial river, it will not be of practical utility, because it runs for more than five degrees of latitude through a desert, is tortuous in its course, in many places much encumbered with timber, and its depth entirely depends upon the seasons. Other authorities, however, entertain a different opinion on the subject, and deem the Murray navigable at certain seasons for a considerable portion of its course; and, consequently, likely to facilitate internal transit very materially, notwithstanding the evident non-navigability of its sea-mouth, and the impossibility of a vessel entering it from the ocean, except in unusually calm weather, from the united force of the current and the immense sweep of rollers, which rise and break for the distance of a couple of miles before the entrance to the mouth of the river is attained.

Before leaving the Murray, we must not omit noticing the "Murray cod" of the colonists, a beautiful and well-flavoured fish, caught at certain seasons in considerable quantity; the general size varying from 15 lbs. to 25 lbs., but frequently much larger. Captain Sturt mentions having seen one, caught by Mr. Scott (the successor of Mr. Eyre at the Protectorate station at

Moorundi), that weighed 72 lbs. Large numbers of a smaller but better kind, about twelve inches in length, resembling the English perch, have recently been taken with nets. While the waters of the Murray are thus occupied, its banks are enlivened by numerous flights of the crested pigeon, the cockatoo, and a vast variety of parrots, whose brilliant plumage contrasts charmingly with the fine gum-trees, which form one of the most pleasing characteristics of this noble stream.

The other streams at present known in South Australia are, the *Inman*, *Hindmarsh*, *Currency Creek*, *Finniss*, *Angas*, and *Bremer*, falling into Encounter Bay and Lake Alexandrina; the *Yankalilla*, *Curralinga*, *Myponga*, *Onkaparinga*, *Sturt*, *Torrens*, *Upper and Lower Para*, *Gawler*, *Hutt*, *Light*, *Wakefield*, and *Rhine*, falling into or running towards Gulf St. Vincent, and the *Broughton*, *Dutton*, and several small streams falling into or flowing toward Spencer's gulf. Not any of these are of sufficient importance to need any detailed notice in this place, especially as many of them will be mentioned in the description of the districts to which they respectively belong.

LAKES.—The known lakes of this province, like its rivers, form but a meagre catalogue; yet, among them are comprised two names already familiar to my readers, to which considerable interest attaches, *i.e.* *Lake Victoria* or *Alexandrina*, the large shallow lagoon recently described as the receptacle of the Murray river, and *Lake Torrens*, that huge and strangely-shaped basin which strikes the eye as so remarkable a feature in the map of the island-continent of Australia.

Lake Torrens, also, we have before had occasion to describe, in relating the explorations of Mr. Eyre (p. 385). It appears formerly to have communicated with Spencer's gulf, and, indeed, is still connected with the head of the gulf by a channel now filled up, but soft and boggy, in places containing salt water mixed with the mud. The lake extends in the form of a horse-shoe over a circuit of at least 400 miles, encircling the numerous ridges of moderate elevation, which form the northern extremity of Flinders' range, and receiving the whole drainage from them. The apparent breadth of the lake has been before stated, on the authority of Mr. Eyre, who traced its shores on the western side of Flinders' range for 200 miles, to be from twenty to thirty miles; while Sturt, who visited its north-eastern portion in 1845, mentions it as only

from ten to twelve miles across. The deceptive appearances caused by mirage and refraction, on its shores, are most extraordinary, and render the evidence of vision very insufficient. Eyre made various attempts to cross the lake, and on one occasion, penetrated into the basin for about six miles, but was always compelled to retreat, by the increasing softness of the mud; once, only, did he succeed in tasting its waters, in a small arm near its most north-westerly portion, and here they were perfectly clear, about two feet deep, as salt as the sea, and of the same greenish hue. The south-eastern portion of the bed of the lake is stated by Captain Frome to be quite dry, and "more properly a desert, than a lake."*

To *Lake Albert*, which is connected with Lake Victoria, Lake Bonney, and other lakes and lagoons, mentioned in tracing the coast-line of this province, we need not again refer.

Of the two pretty inland lakes connected with the Murray, named *Victoria* and *Bonney*, the former is about twenty-four miles in circumference, very shallow, and at times nearly dry; the tortuous channel called the *Rufus*, by which it receives the surplus waters of the Murray, is about eight miles long. Lake Bonney is ten miles in circumference and very shallow, and is supplied solely from the Murray; but its channel,—the *Hawker*, which, taking its windings, is about six miles in length—being too small to discharge the water equally with the fall of the river, has a current in it, at certain times, which gives it the appearance of a tributary, rather than merely a recipient.

TOPOGRAPHY—*Settled Districts*.—The chief portion of the province at present divided into counties, is situated between St. Vincent's gulf and the Murray, on the east and west, and between Broughton river and Encounter bay, on the north and south. These

* A striking contrariety exists between the accounts given of different portions of the lake by Mr. Eyre and Captain Frome, the former describing it from close examination on the west side of Flinders' range, as girded throughout by a steep ridge, like a sea shore from which you descend into a basin, certainly not above the level of the sea, possibly even below it, the whole bed being composed of mud and water; while Captain Frome, who visited its south-eastern extremity, declares it to be "rather a desert than a lake, consisting of loose drifting sand and low sandy ridges, very scantily clothed with stunted scrub on their summits." Mr. Eyre considers that Captain Frome had not reached the *basin* of Lake Torrens—first, because of the manner in which the drainage is thrown off from the east side of Flinders' range, and the direc-

counties (eight in number) were established in 1845. That which first claims our notice, as containing the capital of the province, named,—

Adelaide County, is bounded † on the east, by Gulf St. Vincent; on the south, by the county of Hindmarsh, as far east as Mount Barker; thence by a line continuing along the main range to the division of the waters between the Gawler and the Rhine, and following the creek Moorooroo (Jacob's creek), to its junction with the Gawler, that river then forming the northern boundary to the sea-shore, not including, however, the portion of the Gawler special survey laid out on its left bank.

The City of Adelaide is situated about midway between the northern and southern extremities of Adelaide county, in 34° 57' S. lat., 138° 38' E. long. Although now an episcopal see, as well as a corporate city, possessed of the rights and responsibilities attaching to ecclesiastical and corporate power, it is not yet fifteen years old, for the first intending settlers reached the shores of Gulf St. Vincent the 27th July, 1836, not knowing where they were to locate themselves, for the territory on which they landed had never before been trodden by the white man; but was the abode of the kangaroo and emu, and roamed over by tribes of wandering savages in quest of food. The measures which were taken for selecting the site of the capital of the colony, have been previously stated; but the misunderstanding between Colonel Light and the governor, respecting the position chosen by the former, and the incompetency of several of the assistant-surveyors sent out, caused considerable delay in preparing the lands for selection; much disappointment was experienced by the settlers who had paid in money in England, and expected to be put in immediate possession of the land on their arrival. Until this was done, some tion which the watercourses take to the north-east or north; secondly, because an apparent connection is traceable in the course of the lake from the heights in Flinders' range, nearly all the way round it; thirdly, because the loose sands and low sandy ridges, crowned with scrub, mentioned by Captain Frome, are very similar to those met with near Lake Torrens on the west side, *before* arriving at its basin.

† The boundaries of this and of the other counties of South Australia, are chiefly cited from the proclamation of the local government, by which they were fixed; they are, perhaps, somewhat too minutely stated for the general reader, but the accurate topographical information thus incidentally conveyed, will, I think, make amends for that defect.

of the new comers remained at Nepean bay, in Kangaroo island; but the greater part pitched their tents on a plain, subsequently called Glenelg, close to the beach, at Holdfast bay, there to await the completion of the survey. When the site of the capital was fixed, most of the emigrants removed thither; but, as the applotments were not yet laid out, and the question of priority of choice was to be settled by a lottery, the adventurers were under the necessity of forming another temporary encampment, and the banks of the Torrens river were soon lined with huts erected from the materials most readily procurable; some being constructed of mud and interlaced branches, termed "wattle and daub;" others of turf, of brushwood, or of reeds, and for a roof, thatch, or a piece of canvass, was used. A few had tents, or wooden houses, made in England; fire-places were, fortunately, not essential, but several huts had an opening at one end, enclosed on three sides with stone slabs, and a pork-barrel deprived of its ends, for a chimney; outside the huts a blazing fire was kept, with a huge pot swung over it, gipsy fashion. These primitive structures afford a good idea of the aptness with which Englishmen and *Englishwomen* accommodate themselves to the exigencies of a novel and trying position, and of the speed with which they establish something even of comfort around them, under the most unpromising circumstances. Five months elapsed between the arrival of the first emigrants and that of Governor Hindmarsh; meanwhile, they would have been totally without law or government, had not a strong sense of mingled justice and expediency urged them to establish an authority and to obey its dictates. Indeed, the early settlers appear to have manifested a great deal of sound common sense in their proceedings; to use a colonial expression, each one soon began "to shake down" into his proper position, and orderly communities were established, first at Nepean bay, and afterwards, at Holdfast bay, even before the arrival of the governor.

In January, (27) 1837, Mr. Edward Stephens, then dwelling at Glenelg Plains, addressed a circular "to the purchasers of the first sections of land in South Australia," urging their assembling to examine the proposed site of the chief town on the Torrens, and to remove all doubt or question as to the superiority of the place. On 2nd February, 1837, an address was presented

to the governor, signed by eight gentlemen, requesting that a public meeting might be called on the subject. This was accordingly done on the 10th February, when a motion was carried by 218 land-order votes to 137, in favour of the position on the Torrens chosen by Colonel Light, and it was declared that he had "most ably and judiciously discharged the responsible duty assigned him by the South Australian Commissioners."

In March, 1837, the survey of the town lands was completed; the selections were made by those who brought land orders from England, and the remainder were sold to the highest bidder, the prices varying from £2 to £20 per acre; the average price was £5 per acre. Within the ensuing three years, some of the parties who had purchased at these prices, sold their lots at £200 to £2,000 per acre. The site chosen for the new city, named after the excellent Queen Adelaide, was on a sloping ground, with grassy flats and umbrageous trees, on the north and south banks of the Torrens river, about six miles from Port Adelaide, on the east side of Gulf St. Vincent, and about six miles from Mount Lofty, the beautiful hilly range before described. The portion of the city on the south side of the river comprises 700 acres, and is nearly level; that on the north side contains 342 acres, and is elevated, so as to afford a fine view of the surrounding country, embracing to the eastward the darkly wooded valley of the river, and the peaks and elevations of the Mount Lofty range, with the lighter wooded country at its base; to the westward commanding the whole extent of the Adelaide plains. The activity of the colonists, when they became certain of the site of their city, was soon visible. In June, 1837, it was noticed in the *South Australian Gazette*, that the good citizens were fast emerging from the semi-savage state of life which was at first inevitable; "a cottage planted and fenced round with a substantial English iron fence, a roof adorned with a cupola, surmounted with a weather-vane, and a door, too, graced with a handsome knocker," belonging to Mr Osmond Gilles, the colonial treasurer, triumphantly proved the progress of civilization. During December, 1837, Mr. Morphett remarked that the small park land was being cleared of temporary erections, and that dwellings were being constructed of a superior order, all in the cottage style. They were built some feet from the front lines of the

streets, in order that they might serve for out-houses and offices, when more substantial edifices were erected. A Government House was constructed by the seamen of H.M.S. *Buffalo*, and consisted of mud put between laths, supported by wooden uprights, and covered with thatch. The sailors omitted, in "rigging the house," to place a fire-place or chimney.

Mr. J. F. Bennett, who reached Adelaide in March, 1839, says, that it still retained somewhat the appearance of a collection of booths, such as may be seen at a country fair. Brick and stone were then, however, beginning to take the place of straw and mud, and shingles and slates had partly supplanted canvass and reeds. The old hut gave way to the neat cottage or handsome two-story house. The first tenement erected in Adelaide, even when a few stakes or "pegs" were all that distinguished it from the surrounding forest, was a printing-office, from whence issued a newspaper, which contained the official acts and orders of the government, and the latest intelligence respecting the geography and capabilities of the new land. A wooden church, sent from England in frame, with sittings for 350 persons, was erected near Holdfast bay, at an early date; and on 26th January, 1838, the foundation stone of *Trinity Church* was laid, at Adelaide, by the governor, in the presence of a numerous assemblage of subscribers to its erection. On a leaden plate, was inscribed the names of the trustees and of the incumbent, with the following sentence from Nchemiah ii. 20:—"The Lord of heaven he will prosper us; therefore we his servants will arise and build." An extensive store, built of limestone, at a cost of £2,000, was erected by Messrs. Fisher, in the centre of the town; and in a remarkably short space of time Adelaide had assumed many of the characteristics of an established town. There were, says Mr. Morphett, "neatly and in some cases elegantly spread dinner tables, well-cooked dishes, champagne, hock, claret, and marschino, the presence of some well-bred and well-dressed women, and the soothing strains of a piano." The illusion of sitting at the hospitable board of some luxurious London citizen was only dispelled by the visitor, on quitting the hall-door, tumbling against a cow, pig, or some such indication of colonial prosperity.

Adelaide received a severe check, in 1841-2-3, at the period of general de-

pression before mentioned; but it has since recovered, and made considerable progress; and it now ranks highly among the colonial towns in her Majesty's dominions, and eventually promises to become a noble city. The extensive scale on which it is laid out, and the ample provision thus made for the accommodation of a much larger population than it possesses at present, or is likely to possess even for many years, gives it rather a straggling appearance; but the fault, if it is one, is on the right side; and the plentiful circulation of fresh air thus secured must be very conducive to the health of the inhabitants.

Captain Sturt, writing, in 1849, of the southern portion of the city (which, it will be remembered, is divided by the Torrens into two portions, distinguished as North and South Adelaide), says it is twice the size of the northern, is more extensively built upon, is the established commercial division of the city, and contains the Government House and all the public buildings and offices. The shops and stores now built are of a substantial and ornamental character. The Government House stands in a well-kept enclosure of nearly ten acres, and has the appearance of an English country mansion. It is capable of enlargement. The public offices, built in a parallelogram, with an open space in the centre, are creditable to the colony; and the gaol, on which £36,000 have been improperly expended, is a large and substantial structure.

There are several Christian temples. *Trinity Church*, built of stone, stands on the north terrace, and forms a prominent object; *St. John's*, built of brick, is on the east terrace, from whence there is a commanding view of the Mount Lofty range. *Christ Church* is in North Adelaide. The Roman Catholic church, with its excellent public schools, stands in a fine situation on the west terrace; and there is a Roman Catholic cathedral, I believe, now building. There are several other churches and chapels, appropriated for the worship of the different Christian denominations. The Bank of South Australia is a prominent feature on the north terrace; and there are several other good buildings in various parts of the city. A theatre, capable of holding 1,200 persons, which was built a few years ago, and proved an unprofitable speculation, is now rented by government at £200 a year, and used for the supreme court, resident magistrates, sheriffs' offices, &c.

The streets have respectively a width of 66, 99, and 132 feet, intersect each other at right angles, and are sufficiently elevated above the bed of the Torrens to facilitate a perfect system of drainage, which is very much required; for, with the exception of Hindley and Rundle streets, the thoroughfares are unpaved, and large masses of rubbish are allowed to accumulate. Unless attention be paid to the drainage of Adelaide, a damp summer, followed by great heat, may cause a severe pestilential disease; for it is by the neglect of such precautions that, in climates like South Australia, plague finds not only a temporary but a permanent abiding place.

Hindley-street, about a mile in length, has many excellent warehouses and shops, with elegantly designed fronts and plate-glass windows. It is the principal place for business, and presents an animated appearance.

A large cemetery, sufficient for the requirements of Adelaide for many years to come, is situated outside the city line, on its western boundary.

Adelaide is abundantly supplied with water from the Torrens, and by means of wells sunk sixty to eighty feet. There are numerous springs in the hills, five miles distant, and at sufficient elevation to enable every house to be supplied by pipes.

Four bridges over the Torrens connect the two divisions of the city, which is surrounded by a public demesne, termed the "Park lands," for the breadth of half-a-mile. The advantage of these reserves cannot be doubted, although at present they increase the straggling appearance of the city, and must do so until Adelaide attains the importance anticipated for it by Colonel Light, to whose respected memory a monument, consisting of a pentagonal Gothic cross, forty-five feet in height, has been erected in the centre of Light-square, at Adelaide.

On both sides of the river between North and South Adelaide there are reserved allotments, to the extent of 200 acres, for the formation of pleasure-grounds and public gardens.

Beneath the umbrageous canopies which enhance the beauty of the city park, the annual horticultural and agricultural show of South Australia is held; and the occasion is a festive holiday for the city of Adelaide and the surrounding country. On this occasion, not only many varieties of

delicious fruits, beautiful flowers, and choice vegetables are exhibited, but also articles of export and of domestic economy, raised and prepared by the industry and skill of the colonists, together with models for agricultural implements, samples of corn, wax, honey, leather, starch, and other useful commodities.

Beyond the Park lands, which together with the city contain 400 acres, the "preliminary" or country sections, of 134 acres each, commence. Many of these have been laid out in smaller sections, and are being rapidly built on and improved.

The race-course of Adelaide is a peculiarly good one; and during the three days in the beginning of January annually devoted to this favourite amusement, the settlers from far and near throng to the city, racing being in this, as indeed in all the Australian colonies, a very popular pastime—as are also the other English sports of hunting, cricket, &c.

Level plains extend between the city and the *Port of Adelaide*, in 34° 51' S. lat., 138° 34' E. long., which is situated on the eastern bank of a large creek running nearly parallel with the coast for about twelve miles, and assuming, with its numerous branches, the appearance of a river. There are two entrances from seaward—the northern is shallow; the southern contains deep water, which is continued for ten miles. It is a very fair harbour, although originally it had only twelve feet at low water on the outer bar. By means of a dredging machine, the sand has been removed so as to allow vessels of 300 to 400 tons to pass into the haven; and from the nature of the submarine formation, the bar may be removed to a still greater extent, if necessary, and any improvement thus effected will be permanent. During the rainy season the Torrens pours some of its waters into the head of Adelaide creek. There is a light ship off the bar, at the entrance of the Port Adelaide creek, and a steam-tug now enables vessels to reach the shipping station without the vexatious delays to which they were formerly subjected. That portion of the population connected with the shipping or the harbour, reside on the spot, and give to Port Adelaide the appearance of a small town; but the only substantial buildings are the wharfs, one belonging to the government, the other to the South Australian Company, and the custom-house. There is a good macadamized road between the port

and city of Adelaide (distant about seven miles), constructed at an expense of £12,000 by the South Australian Company, and subsequently transferred to the local government, in exchange for 12,000 acres of land. But a rail or tram-road is still much needed—not only from the port to the city, but also to Gawler town—for the conveyance of ore and wool to the place of embarkation; this useful measure will, it is expected, be soon accomplished.

Another excellent road, the foundation of which is of stone brought from Kangaroo island, has been constructed across a mangrove swamp, between the port and *Albert Town*, a straggling village about a mile distant; the cost of this road, from the expensive period at which it was commenced, is stated at £14,000, which is improbable.*

Besides that connecting it with the port, four other roads branch off from Adelaide, of which one leads north through Gawler town—another, called the *Great Eastern Road*, to Mount Barker and the Murray; the third, running southwards, crosses the range to Encounter bay; and the fourth, to Glenelg and Holdfast bay.

There are several pretty villages in the vicinity of Adelaide; indeed, within five years of its establishment, upwards of “thirty villages were started” within three miles of the city; in 1841, there were but seven remaining, viz., *Hindmarsh*, containing 200 houses; *Bowden*, 50; *Prospect*, 25; *Thebarton*, 100; *Kensington*, 40; *Walkerville*, 50; *Islington*, 45. *Hindmarsh*, *Bowden*, and *Prospect*, were principally inhabited by persons engaged in the carriage of goods from Port Adelaide to the city, and by brickmakers and labourers. *Thebarton* and *Walkerville* contain many substantial houses. *Kensington* and *Richmond* are quiet and secluded villages embosomed in trees, with neat residences, and beautiful gardens. *Islington*, on the high-road to Gawler, is a favourite place for dairymen, on account of the good cattle runs immediately behind the village, which contains several good inns.

About three miles from Adelaide, on the right bank of the Torrens, is the village of *Klemzig*, the oldest of the German settlements; the houses having been built by the refugees on the plan of those of their native country, contrast pleasingly with the general style. The scenery in the valley of the Torrens is described as picturesque, its

grassy flats being shaded by beautiful and umbrageous trees, and the land in the vicinity of the sources and tributaries of the Torrens is very valuable. The river itself, although in summer frequently but a chain of deep broad pools, with long intervening dry spaces, in the winter pours down an impetuous stream, furnished by the mountain torrents, whose channels lie in the deep glens or ravines that occur between the spurs of the Mount Lofty range. The scenery around the heads of these little streams is described by Mr. Angas as wild and romantic, especially that of *Glen Stuart*, a rocky pass between the hills; during its course through which the *Moriatta rivulet* dashes over steep chasms of rock, with precipices rising like walls on either side, forming three distinct waterfalls. In one of these the water has a descent of some seventy feet, falling into a deep pool, from which it again emerges on its downward mission to the plains.

The borders of this stream are in many places choked with the fresh-water tea-tree; the native lilac, and a dwarf species of mimosa are frequent along its banks. The variety of *Xanthoreæ* or grass-tree, styled *Black Boy* by the settlers, overruns the rocky sides of the hills, usually abounding in the most stony and inaccessible places.

The marine townships of *Glenelg* and *Brighton* have a good beach, and are frequented as bathing-places by the inhabitants of Adelaide: a charming ride of four or five miles, along an excellent road, brings the citizen to the bay, which is a favourite evening’s excursion after the heat of the day is over.

The little river *Sturt* falls into the gulf at *Glenelg*, after spreading over the flats behind the sandhills at that place. On its banks, as also on those of the *Onkaparinga*, a more important stream about fifteen miles to the southward, there are excellent farms. The township of *Noarlunga* is well situated about two miles from the head of the *Onkaparinga*, which is navigable so far for small craft. A large steam flour-mill, and a bridge of 100 feet span, have been erected; several lodes of copper ore exist in this vicinity. Beyond *Noarlunga* is the township of *Wilunga*; the country between is generally good, portions of it are sandy and scrubby, but *Morphett’s Vale* is a rich and extensive piece of land, from which *Sturt* mentions having seen several large stacks of hay cut, before it was settled, and while yet in a

* Angas’ *Savage Life*, p. 207.

state of nature. Willunga lies close under the foot of the hills, which here trending to the south-south-west, meet the coast line extremity of the Southern Aldingha plains. Close to this point is the conical hill named *Mount Terrible*. The Mount Lofty range which forms the eastern boundary of the extensive plains on which Adelaide stands is about three miles distant; the intermediate space traversed by the Great Eastern or Mount Barker road, is laid out in carefully cultivated farms. On the first rise is the Glen Osmond lead mine, from thence the road winds up a romantic valley to the summit of the range, which is covered with a dense forest of stringy bark, and adorned with a great variety of papilionaceous plants; and several beautiful kinds of orchidaceæ. On the eastern confines of Adelaide county is the village of *Hahndorf*, with its industrious Prussians, situated among the Mount Barker hills, and the village of *Nairne*, immediately to the north of which is Mount Torrens.

To the north and east of the city of Adelaide are extensive tracts of fertile land, intersected by the valleys of the North and South Para rivers, beyond which lie the rich districts of Lynedoch valley, of which however but a small portion is comprised within the county whose leading features we have now noted.

The names and limits of the four counties north and north-east of Adelaide, are as follows:—

Gawler County, bounded on the south by Adelaide county as far as the extreme east of the Gawler special survey (all of which it includes); thence by a line following round this survey to the main north road, and running along this road to the crossing of the Wakefield river, bounded on the north by this river, and on the west by the coast.

Light County, bounded on the west by the Gawler county, and on the south by Adelaide county, as far as the dividing ridge between the Gawler and the Rhine; thence by a line following the main range to the north, past Mount Rufus, to above the sources of the Light, in the parallel of about $33^{\circ} 50'$; turning round the ridge on the west bank of the Gilbert, in a line nearly direct upon Mount Horrocks, until it meets the eastern sources of the Wakefield, and running along this river to the crossing of the northern road.

Stanley County, bounded on the south by the counties of Gawler and Light, on the east by the main range as far as the parallel of

$33^{\circ} 20'$, and then by the down course of the Broughton river, till about due north of the mouth of the Wakefield, a line connecting these points forming the western boundary.

Eyre County, bounded on the south by Sturt county; on the east by the Murray, (including the sections laid out on each bank), as far as the Great Bend; from thence by a direct line to the north-east angle of Light county, which forms the western boundary.

Of the territory comprised in these four counties, the central and southerly portion is the most settled. The chief place—*Gawler Town*, situated in the angle formed by the junction of the little Para and Gawler rivers, though yet in its infancy, promises to become of considerable importance; it contains a church, three or four good inns, a steam flour mill, several stores, and other buildings. The copper ores from the Burra-Burra mines pass through this town for shipment at Port Adelaide, which is about twenty-three miles distant. Gawler river rises in the southern part of the Barossa ranges, and after receiving the Little Para, flows to the westward of the shores of St. Vincent's gulf. It has extensive and well-wooded flats of deep alluvial soil along its banks, flanked by the plains of Adelaide, the line of trees running across them, only with a broader belt of wood, indicate the course of the river in a similar manner to that of Adelaide creek. "Except these features," says Captain Sturt, "and two or three box forests, at no great distance from Albert town, the plains are almost destitute of timber, and being very level, give an idea of extent they do not really possess, being succeeded by pine-forests and low scrub to the north from Gawler town."

Beyond Gawler town, both to the north and east, a decided change becomes perceptible in the character of the country; the monotonous plains give place to an undulating and highly wooded district, containing many fertile valleys. The road between Gawler town and the river Murray, at about eight miles from the former, passes through *Lynedoch Valley*, an extensive and fertile tract, where there are two copper mines and a pretty hamlet. There is very little surface water; but a copious supply, of excellent quality, has been found attainable by digging five or six feet down in the centre of the valley. Lynedoch valley is bounded on the east by the *Barossa range*, as the beautiful country is termed, situated between

the river Light and the hills, called the Heranian range; those termed the Hawdon range and the Belvedere range, comprising an area of about 225 English square miles. This district is rich in metals, deposited close to the surface, and occasionally cropping out. It is watered partly by the Gawler and partly by the little river Rhine. One of its most picturesque and valuable tracts is Angas Park, the property of Mr. G. F. Angas, which is about seven miles long and four broad, with a deep siliceous soil, blackened by the abundance of vegetable matter. *Salem Valley* is a lovely spot: the flat of the valley, through which the Gawler flows, is from one to five miles broad, with undulating hills rising on either side. The thriving village of *Bethany*, inhabited by several hundred Germans, is situated at the foot of the Barossa range, as are also those of *Lobethal* and *Langmeil*; but the chief place in the district is *Angaston*, at *German Pass*, which is picturesquely situated at the head of a ravine, looking towards the Greenock hills, and possesses a considerable number of comfortable habitations, a good hotel, schools, and stores. Outside the town is an excellent place of worship, with a cemetery, enclosed by stone walls.

About twelve miles to the north-west of Angaston, close to the river Light, is the rich copper mine of Kapunda, the property of Captain Bagot and Mr. Dutton, from which the valuable muriate of copper, or acatamite, previously found only in South America, is procured. The cottages of the miners are built of stone, obtained from a hill of clay slate on the property, which, being more or less tinged with copper, gives them a peculiar appearance. A chapel, serving also as a school-house, has been erected, and the little hamlet wears a cheerful aspect. Before long, a township will probably be formed here. The river Light deserves remark, not only for the mineral wealth in its vicinity, but also for the thousands of acres of fertile soil ready for the plough, diversified by undulating hills, with here and there patches of open soil. The fertility of the numerous branch valleys which strike off from the main channel of the Light, on each side, is testified by Mr. Dutton from personal acquaintance, he having resided, for some time, at Anlaby, under Mount Waterloo.

On the Light river, and from thence northwards, the cultivation of the soil is not carried on, excepting by those settlers who

grow corn for their own consumption; here, also, "the bush" may be said to commence, as all the country to the north, taking in the Wakefield, Hill, Broughton, and Hutt rivers, Crystal brook, &c., as far north as Mount Arden, is occupied by sheep and cattle farmers. In these districts there is no lack of the best soil, and in most of them, land already surveyed is open for selection to the newly arrived emigrant.* A remarkable feature in the extensive downs through portions of which the Wakefield flows, is the absence of trees; they are, nevertheless, well grassed, and covered with a profusion of orchideous plants. The Broughton river, which, as we have before seen, forms the northern boundary of Stanley county, and, consequently, of the territory of which we have been speaking, was crossed by Eyre in 33° 28' S. lat. At that point its bed is of considerable width, and its channel occupied by long, wide, and very deep water holes, connected with one another by a strongly running stream, which seldom or never fails, even in the driest season. The soil upon its banks, however, is described as not valuable, being generally stony and barren, bearing a sort of prickly grass (*spinifex*). Wild-fowl abound in its pools.

In the eastern portion of Stanley county is the famous Burra-Burra mine, situated on the Burra creek, about eighty-five miles in a direct line from Adelaide. The ores lie in the same direction as the ranges in which they are placed. Captain Sturt makes the following mention of this immense mine:—"The deposits of iron are greater than those of copper, and it is impossible to describe the appearance of the huge clean masses of which they are composed. They look, indeed, like immense blocks that had only just passed from the forge. The deposits at the Burra-Burra amounted, I believe, to some thousand tons, and led to the impression, that where so great a quantity of surface ore existed, but little would be found beneath. In working this gigantic mine, however, it has proved otherwise. I was informed by one of the shareholders, that it took three hours and three-quarters to go through the shafts and galleries of the mine. Some of the latter are cut through solid blocks of ore, which glitter like gold where the hammer or chisel has struck the rock, as you pass with a candle among them." Statistical information respecting

* *South Australia and its Mines*, by Francis Dutton. 1846.

this extraordinary mine is given elsewhere.

The greater part of Eyre county is occupied by "the dark and gloomy sea of scrub" previously adverted to as the Murray Belt, here about twenty miles wide; the hilly country immediately to the westward of it, is of an inferior description, portions only being occupied as sheep stations. A dray-road has been formed through the scrub, communicating with the government station of Moorundi, distant twenty-six miles from the Great Bend of the Murray, and ninety from Adelaide. It was established by Governor Grey, in 1841, in consequence of the collisions, too frequently attended with loss of life and great destruction of property, which were constantly occurring between the settlers coming overland with stock from New South Wales, and the natives. So deep a spirit of revenge had thereby become kindled in the breasts of the latter, that although suffering severely from every contest, they would not allow any party with stock to pass along the line of the river, without attempting to stop their progress. The appointment of Mr. Eyre as resident magistrate and protector of the aborigines, was most judicious, from his proved humanity, and the influence he had acquired over the natives. By his exertions, aided by the occasional distribution of a limited supply of blankets and flour among the aborigines, their good-will has been obtained, and the banks of the Murray, no longer the scene of conflict and slaughter, are now occupied by stock stations; while in calm weather, the natives, in their canoes of bark, are constantly upon its waters, busily employed in striking fish.

Mr. Eyre, now lieutenant-governor of New Zealand, has been succeeded at Moorundi by Mr. Scott, whose influence appears to equal that of his predecessor.

To the south of the county of Eyre lie the counties of Sturt, Hindmarsh, and Russell.

Sturt County, bounded on the south and east by the Russell county, as high as its termination in about $34^{\circ} 50'$ S. lat., and thence by the Murray (including the thirty-nine sections), to the parallel of about $34^{\circ} 32'$ due east of the dividing ridge between the Gawler and the Rhine, a line between which points forms its northern limits; on the west by the counties of Adelaide and Hindmarsh.

Hindmarsh County, bounded by the coast-line from the termination of the main range

in St. Vincent's gulf below Mount Terrible, round Cape Jervis, to the sea outlet of the Murray; thence by the south-east shore of Mundo Island, in Lake Victoria, to Point Sturt, on the northern shore of the lake; thence by a direct line across the lake to the mouth of the Bremer; thence by that river up to the crossing-place of the eastern road, above Langhorne's station; thence, taking a line about N. 20° W., till it strikes the main range at Mount Barker, continuing along the eastern range (enclosing the Mount Barker survey), to Mount Magnificent; thence by a course about north-west, to the top of the Willunga range, where it is crossed by the southern road, and following the ridge to the sea below Mount Terrible.

Russell County, bounded by the coast-line from the sea outlet of the Murray, to a spot opposite where the Salt creek empties itself into the Coorong; by this creek, to the rocky ridge at its source, and thence by taking a line due north, till it cuts the Murray, in about $34^{\circ} 50'$ S. lat., bounded on the north and west by the Murray, as far as Pomunda; thence by a straight line across Lake Victoria to Point Sturt.

Of the territory included in these three southern counties, the finest and most cultivated portion is comprised in the district which, taking its name from its distinguishing feature, is called *Mount Barker*. This mountain, with its saddle-backed summit, is a very conspicuous object, visible for many leagues in the interior, beyond the Murray; it forms a landmark for overland parties from New South Wales, by which they steer for the settled districts of South Australia. The district may be said to extend from the village of Nairne (before mentioned) to Strathalbyn, on the river Angas, the latter place being fifteen miles from the shores of Lake Victoria. It abounds in beautiful valleys which, though of limited extent, are level and clear; their soil is a rich alluvial deposit, and the plough may be driven from one end to the other, without meeting a single obstacle to stop its progress. The trees are grouped as if by the hand of art. All British grains and fruits are climatized here — and apples, strawberries, and other fruits, which do not thrive well upon the plains, grow luxuriantly at Mount Barker, while upon the sunny low lands, all the fruits of the Mediterranean are produced in abundance. Besides much fine agricultural land, there is also

a considerable portion of good pasturage; but there are, nevertheless, many stony ranges entirely useless, even to stock.*

Mount Barker, the county-town of the district, contains a court-house, where a bench of magistrates sit once a week; a police-station, a post-office, a school-house, steam flour-mill, an inn, and some respectable private dwelling-places. The German village of *Hahndorf*, before named as situated on the confines of Adelaide county, belongs to this district, as does also the township of *Macclesfield*, situated on the river Angas. This stream has its source in some clear bubbling springs near the township, that gush up from the earth, shaded by mimosa trees, supplying a constantly running brook of the purest water. *Macclesfield* is, at present, a pretty little village; the white cottages and tents of its settlers, intermingled with corn-fields and gardens, and groups of cattle reposing under the shade of the gum-trees, bespeaking the nucleus of the future town.† Its native name is *Kangooarinilla*, signifying "the place for kangaroos and water."

To the east of the Mount Barker district a flat country, with a poor and sandy soil, extends to the Murray belt, beyond which, on the direct road to Mount Gambier and Rivoli bay, and fifteen miles below Moorundi, is the site of the township of Wellington, as yet only a station for the mounted police. A ferry has been established here across the Murray, which enters Lake Alexandrina, about half-a-dozen miles from this point.

"The country immediately to the eastward of the Murray affords, in some places, a scanty supply of grass for sheep; but, generally speaking, it is similar in its soil and rock formation, and consequently, in its productions, to the scrubby country to the westward."‡

* Many parts of the shores of Lake Victoria are composed of rich land, but in others they are very bleak and desolate. The ground on the eastern side of the lake is a sand flat, gradually improving to the southward; where the shore begins to trend to the westward, it becomes very good. The rising ground behind, though sandy, affords excellent back-runs for cattle, and the hills are well timbered. Along the eastern and southern shores of Lake Albert,

the same character of country continues, but the soil appears to be still better, and the flats become more extensive. Mr. Frome states, in his report, that he considers that there are, at least, 50,000 acres of good agricultural soil on the borders of the latter lake.

The *District of Encounter Bay* lies between the abrupt cape called Rosetta head and the sea-mouth of the Murray. It consists of several beautiful valleys, covered with luxuriant grass, and backed by the ranges of hills which, opposite Encounter bay, occupy nearly the centre of the promontory, forming a division between the eastern and western waters, which is marked by a considerable breadth of stringy bark forest. The settlers here are numerous, and the whale-fishery is carried on with considerable success.

Currency Creek and *Finniss River* empty themselves into the Goolwa, as the lagoon is called connected with Lake Victoria, to the eastward; the valley of the former stream is prettily wooded and grassy, but contains no very great extent of good land. To the north and south it is bounded by barren scrub. Near the head of the creek is a great sandy basin, which forms a striking contrast to the fertile valleys in its vicinity, and is, in itself, a remarkable physical feature. At an elevation of between 600 and 700 feet, this basin is surrounded by rugged stony hills, excepting to the south and the south-east, in which directions it falls into the valley of the Hindmarsh and Currency creek, respectively. *Mount Magnificent*, *Mount Compass*, and *Mount Jagged*, rise in isolated groups in different parts of this basin, the soil of which is pure sand; the surface undulating, and in many parts covered with stunted banksias. The Finniss rises behind Mount Magnificent, and is joined by a smaller branch from Mount Compass, as it flows from the eastward.

To the north-east of Hindmarsh river, lies the narrow but beautiful valley of the *Myponga*, between which and Mount Terrible, the country is poor and scrubby. *Aldinga Plains* (to the north of the *Myponga*), are sufficiently extensive to feed numerous sheep; but are at present unused, from their deficiency of surface water. The little river *Yankalilla* empties itself into Gulf St. Vincent, passing between hills of white sand, overgrown with an almost endless variety of dark evergreen shrubs and

* Captain Sturt's *Account of South Australia*.

† Angas' *Savage Life in Australia*.

‡ Captain Sturt.

salsolaceous plants; like the valley of the Myponga, that of the Yankalilla ranks among the most fair and fertile tracts in the colony; the country between them is exceedingly romantic, becoming more broken and mountainous towards Rapid bay, a short distance from whence is the valuable lead mine of Yattagolinyay.

Before leaving this portion of South Australia, it may be noticed, that from Cape Jervis, its south-east extremity, a practicable route for wheeled vehicles has been repeatedly traced to a good and available country twenty miles beyond *Mount Remarkable*, in the north, equal in lineal distance to the space of country between the eastern boundary of Cornwall and the eastern boundary of Middlesex, and containing, it is believed, as large a proportion of available land in a given breadth, as was comprised in that division of England while yet in a state of nature.

Partially located and unsettled Districts.—The extremity of the Eyria peninsula, situated between Spencer's gulf and the Great Australian bight, comprises,

Flinders County, which is bounded on the south by the coast between Capes Wiles and Cape Catastrophe; on the east, by the coast from Cape Catastrophe to the northern extremity of Louth bay, including all the islands on the coast between these parallels, as well as William's and the Gambier island; the northern and western limits are still undetermined.

The settlement at Port Lincoln is the only one, not merely in Flinders county, but in the whole province westward of Spencer's gulf. The character of the neighbouring country, and the future prospects of the township, have been differently viewed by several explorers; some contending that the territory around is worthless, others that there are large fertile tracts. Unless, however, a district be thinly wooded, and explorable by navigable rivers, it is almost impossible to form an accurate opinion.

According to Lieutenant-colonel Gawler, whose geographical and geological observations are extremely valuable, the surface of the Eyria peninsula, which is nearly an equilateral triangle of 200 miles on each side, is divided into three great portions:—(1) the *mountainous table-land tract*; (2) the *low undulating country*; and (3) the *hill country*. The first has been noted at p. 660. The many short and narrow mountain ridges, which rise from 300 to 700 feet above the

plateau, in much confusion, but with the prevailing direction towards Spencer's gulf, are generally grassy and sprinkled with small casuarina trees; the water-courses between these ridges are occasionally lined with casuarina, and with pines twenty-five to thirty feet in height; the great outer slopes of the table-land are also frequently grassy; but the small plains between the bases of the ridges and the water-courses are almost always covered with brush, scrub, or heath, generally the latter.

The herbage is of the description known as kangaroo grass, but more commonly of the same slender sort as is seen on the plains between Adelaide and the sea. The soil which bears the grass is a red ferruginous sandy loam, much of it appearing rich of its kind, and available for agricultural or horticultural purposes.

The *low undulating country* forming the tongue of the peninsula consists of gentle elevations, not more than 300 feet above the sea, and is said to be a poor region. A scarcely varying and nearly flat belt of brush, scrub, and heath, seven to fifteen miles wide, extends along the sea-coast to the base of the mountain table-land, whose drainage passes through this tract. Several salt lagoons, frequently dry and clothed with fine groves of the "salt-water tea tree," are found in this district.

The *Hill Country*, elevated 600 to 1,000 feet in height, commences in about 34° 10' S. lat., and has its common courses to north-east and south-west, with strong deviations to north-west and south-east. In the northerly subdivision of these ridges, *i.e.*, from the "Sheep hills," in 34° 11' to "Northside hill," a direct distance of forty miles, the country is extensively covered with good grass; towards Cape Catastrophe, a similar country, though in a more limited proportion, extends. The Hill country contains many fine valleys, one named the *Tod* is sixteen miles in length, and has numerous lateral branches. Another, six or eight miles to the west of Boston bay, is a succession of broad swamps, some of which are now available for agriculture, as the soil in these valleys is of excellent quality. In the hill ranges there is a considerable quantity of permanent surface-water, the grassy hills and valleys are sprinkled with fine casuarinas, and the scenery is very beautiful.

Captain Hawson ascended the Hill country from the *Happy Valley* in a northerly direction for fifteen miles to the confluence of the

Tod and *Severn* rivers, about five miles west-north-west of Mount Gawler (twenty-one miles distant from Boston bay.) During the whole of this journey, he passed over a very fine sheep country, the hills being covered to their summits with grass. The explorer reached *Cowan's Vale* and *lake*, (part of *Steven's* river,) about twenty miles north-north-west of the Happy valley. "Nothing," he says, "can be imagined more beautiful than the country about this vale (which is about five miles long by one broad); the grass in the flats being abundant, and growing to a great height." *Smith's Valley*, eight miles distant in the same direction, is equally rich, and contains many thousand acres of excellent land fit for agricultural purposes. The hills in every direction are adapted for pasturage, and abundantly supplied with water the whole year round. During this journey of fifty miles the travellers were never two hours without water, and did not meet with five miles of unavailable land. When at the greatest distance from the Happy valley the country, as far as the eye could reach, appeared to be of a similar character. The opinion of Mr. Robert Tod, of the country to the north and west of Port Lincoln, is equally favourable; he says the majority of the hills, even during the dry season, afford good sheep pasture, while the valleys appear to be adapted for agricultural purposes.

Major O'Halloran and a party of police made two excursions, one of eighty-five miles to the north-east, and the other of fifty-five miles to the north-west of Port Lincoln. He reported the country to be well watered, covered with luxuriant herbage, abounding in game, and with numerous natives. Angas, writing in 1846, says that about thirty miles to the north and west of Port Lincoln, there is a rich and beautiful country, as yet but little known, having several fine lakes of water, and luxuriant pasture land, scattered with park-like trees; beyond these lakes rise two distinct ranges of lofty and abrupt hills. Waungerry is the native name for the largest lake, which abounds in black swans and other water-fowl; kangaroos, emus, and a variety of smaller game are still numerous in the surrounding country, which is unoccupied by settlers.

These opinions of disinterested eye-witnesses fully redeem Flinders county and the Port Lincoln neighbourhood from the

imputation of barrenness; there are now from 70,000 to 100,000 sheep in this district, and a practicable line of route having been discovered from Adelaide along the western shore of Spencer's gulf, the value of landed property will most probably increase; the more so, if, as reported, good copper ore be also found in this part of the colony, which has already commenced shipping wool and tallow direct from Boston bay to England.

Mr. Eyre crossed the country in a direction nearly due east from Streaky bay towards Mount Arden, September 18, 1839. The first part consisted of alternations of brush, of open grassy plains, and high scrubby and sand ridges, interspersed with hard limestone flats, to the base of the Gawler range (see page 660), whence the route was through a perfect desert, very scrubby and stony, with much prickly grass growing upon the sand ridges. The hills seen were without either timber or shrubs, and very barren, with their front slopes exceedingly steep, and covered by small loose stones; several salt lakes were seen in various directions, but no indications of fresh-water or springs. Ridge behind ridge appeared to rise to the north-west, increasing in elevation. Further east the view from a hill showed to the north one vast sea of level scrub, and in the midst of it a lake. The journey to the head of Spencer's gulf was performed with much difficulty; Eyre says, "there were no water-courses, and no timber—all is barren, rocky, and naked in the extreme." It appears to me probable that the Gawler range extends continuously to the north-west, and that a good country may be found on the northern sides of the range at a distance of fifty to 100 miles inland from the Great Bight, improving as it approaches the districts of Western Australia.

Yorke Peninsula has only been partially examined; so far as is known, the shore is generally low, with several sandy beaches, on which may be seen ironstone, granite, whinstone, and quartz. The land, as seen near Point Pearce, rises gradually from the coast towards the centre of the peninsula, and consists of open plain, with occasional belts of forest. This description of country appears to exist as far as the eye can see, north or south. The soil is light, of a loamy nature, and well covered with fine grasses. Fresh water has been discovered in several places. The scrub and pine brush

are in belts, but not dense.* The water shed appears to be westerly. It is premature to decide as to the pastoral or agricultural capabilities of the peninsula, or as to its mineral resources. The geographical position is good; with navigable gulfs and harbours on either side, and possessing a temperate climate, it will doubtless attract attention as the population and wealth of the province increase.

The country to the eastward of the head of Spencer's gulf, and north of Stanley county, has not been well explored: the district about Mount Remarkable is said to be exceedingly picturesque and good, and possessed of considerable mineral advantages. A special survey of 20,000 acres has been taken by a company, for the express purpose of working any lodes that might be found. After passing the Mount Remarkable range, the aspect of the land deteriorates, and continues falling off towards the dreary region which extends round the head of the gulf, and towards Lake Torrens.

With regard to the country eastward of the high land, extending north from Mount Bryan, as far as Mount Hopeless, a distance of 300 miles, as far as the meridian of 141° , and probably beyond it, the result of several investigations shows, that there is no land available for either agricultural or pastoral purposes; and in the unbiassed opinion of Captain Frome, of the Royal Engineers, though there may be occasional spots of good land at the base of the main range, on the sources of the numerous creeks flowing from thence towards the inland desert, these must be too limited in extent to be of any present value.

Two recently-formed, but important counties, yet remain to be noticed, situated in the south-eastern portion of the colony, viz. :—

Robe County, bounded on the north by the parallel of $36^{\circ} 54'$ S. lat., extending from the sea-coast to where it intersects the 141st meridian; on the east by the said meridian; on the south by the northern boundary of Grey county; and on the south-west and west by the sea-coast.

Grey County, bounded on the east by the meridian of 141° from the sea-coast, to where it is intersected by the parallel of $37^{\circ} 20'$ south; on the north by the said parallel, from its intersection with the 141st meridian, to the sea-coast; on the south-west and south by the sea-coast. In Robe

* Report of Mr. Hughes.

county a township has been laid out on Guichen bay, and one in Grey county, on Rivoli bay. Governor Grey, accompanied by Mr. Deputy-surveyor Burr, explored the territory now comprised in these counties in 1844. From the statement of these gentlemen we learn, that an almost uninterrupted tract of good country stretches between the rivers Murray and Glenelg, which, in some places, thins off to a narrow belt; in others, widens out to a very considerable extent; and towards the boundaries of Victoria province forms one of the most extensive and continuous tracts of good country which is known to exist within the limits of South Australia. The general features of this line of country may be briefly stated. From the neck of the peninsula which separates the Coorong from Lake Albert, to the Salt creek, or Bonney's creek, there is a belt of grassy casuarina hills, with numerous plains of good soil, in which water may be obtained within a few feet of the surface. This belt is bordered on the north-east by desert country, on the south-west by the Coorong. From Bonney's creek to the crossing of the Coorong, a distance of about thirty-five miles, the road passes generally amongst a succession of salt swamps and low scrubby hills. About two miles north of this road, and following a direction nearly parallel to it, is the low range, named Wambat range, behind which there is an extensive fresh-water swamp, several miles across, which appears to be subject to annual inundations. The soil on this swamp is similar to that on the flats of the Murray; in it are many grassy hills, which have the appearance of islands. Beyond the swamp, to the north and north-east, there are a succession of ranges which do not, from a distance, look very promising. From the crossing of the Coorong to Cape Bernouilli the country improves; from Cape Bernouilli to Guichen Bay, and for some distance around Mount Benson, and to Lake Hawdon, there is a useful tract of country. There are several ridges of high land, separated by low level ground, a great portion of which is subject to inundation; but the soil is excellent; and some of these plains have been sufficiently raised by volcanic action, to render them dry and available for pasture or agriculture. Around Rivoli bay there is much good land and picturesque scenery; from thence to Mounts Schanck and Gambier (see p. 661), the country is, for the most part, of the richest description,

the soil of a dark brown loam. The trees grow luxuriantly; the blackwood attains an extraordinary size; beside which, there are several trees quite different from those of Adelaide. The Tatiara country, once so celebrated for the ferocity and cannibalism of its inhabitants, is now occupied by settlers, who have of late crossed the Murray, in considerable numbers, to form stations there. Between the land bordering the left bank of the Murray, and that contiguous to the sea-coast, there remains a considerable extent still to be explored, before any decided opinion can be formed as to its character.

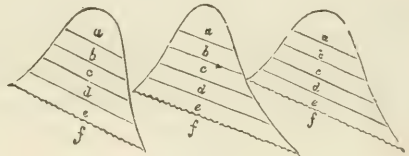
The following are the sailing distances, in nautical miles, from Adelaide:—England, 11,500; Cape of Good Hope, 6,000; Ceylon, 4,500; Mauritius, 4,400; Timor, 2,700; Java, 2,650; Melbourne (Port Phillip), 450; Sydney (New South Wales), 1,134; Freemantle (Western Australia), 1,400 miles.

GEOLOGY.—There has evidently been, in this portion of Australia, a subterranean movement of great power, which, finding no vent in the northern district, in the vicinity of Mount Arden, pursued a southerly course, where it met less resistance, and by successive upheavings tore up the superincumbent strata, and raised to a considerable elevation a belt or zone of rocks, flanked by similar and parallel ridges. The dip of the strata composing the mountain range of South Australia, from 32° to 36° S. lat., so far as has been observed, is generally to the southward; the exception to this declination is probably attributable to the existence of rocks of igneous origin, such as granite, sienite, greenstone, &c. The rocks, of which the main range is composed, belong to the oldest of the primary strata; they are, so far as known, totally devoid of any evidence of the existence of animal or vegetable life during their formation; but the rocks on the plains teem with fossil remains, many of which belong to species identical with, or nearly allied to, the species now existing in the adjacent seas. The primary or sedimentary rocks of the mountain range have manifestly been forced out of an horizontal position by subterranean action; but the strata composing the plains which rest upon the sedimentary rocks are perfectly horizontal, and have, therefore, evidently not been subjected to the influence of the upheaving power.

Near Mount Arden, the indications of volcanic agency are more manifest than at the portions of this range farther south;

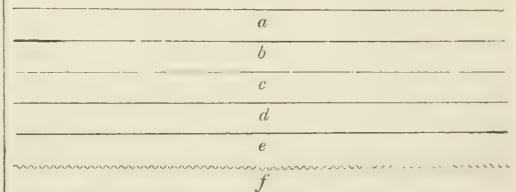
and in the same latitude as Mount Arden, to the eastward, Captain Frome, of the royal engineers, noticed basaltic rocks, thermal springs, and what appeared to be the crater of an extinct volcano. It appears to me that the axis of perturbation was to the south-east, and that the bent-up gases found, or rather forced, an exit in numerous small volcanoes, of which the craters are still to be seen in the province of Victoria, on the line of country extending from Lake Hindmarsh to the basin of Port Phillip. The manner in which the Adelaide range was raised from the bed of the ocean, is explained by the following diagrams, prepared by Mr. Burr, who has given much attention to this interesting subject:—

N Fig. 1. S.



“This section exhibits a regular succession of strata of the same mineralogical character, and lying in the same order. The arrangement might be conceived to arise from a uniform and powerful subterranean action on strata, which had formerly been horizontal, and placed above one another in the following order:—

N Fig. 2. S.



Where *a*, *b*, *c*, *d*, and *e*, represent strata of sedimentary rocks, which were originally deposited on the unstratified rocks, *f*. For it is evident, that in order to produce the effect exhibited in Figure 1, we have only to propel a force, having a tendency to rise upwards, from the north to the south, when the horizontal strata in figure 2 would be thrown into a position similar to that exhibited in figure 1, which represents, in a general manner, the arrangement of the strata composing the principal range of South Australia. In this figure, *a* represents a quartzose sandstone traversed by veins of quartz, frequently accompanied with ironstone; *b*, a coarse dark-coloured slate, with veins of quartz, and occasionally of laminated specular iron; *c*, limestone beds, frequently very impure, and passing into slate and slaty sandstone. In this there are frequently veins of calcareous and other spars, with quartz, and ores of the metals, iron, copper, lead, &c., &c.; *d*, mica slate chlorite slate, hornblende slate, passing upwards into sandy slates, and thence frequently into sandstone. This strata is also metalliferous, and contains veins

of hornstone, in which are calcedony, opal, agate, cornelian, and jasper of varieties, especially near its junction with the strata immediately above it; *e*, gneiss, which is metalliferous, and frequently contains garnets; *f*, granite, and other igneous rocks."

The thickness of the strata varies much in different places, but the exact extent has not yet been ascertained. The arrangement above given is subject to variations arising from local causes. In all probability the east and west faces of the Adelaide range were covered by the ocean, long after the force which raised the mountains had ceased to operate in that direction. Mr. Burr is of opinion that the successive deposits accumulated at the foot of the range were, at no distant geological period, raised, from being the bed of the ocean, to the position of dry land, by an intense and deeply-seated upheaving force, which, by degrees, and in an uniform manner, raised the fossiliferous strata to their present level; and that this force was exerted in a direction from west to east, as explained in the following diagram:—



In support of this opinion, of a positive, or at least comparative period of repose, it is noticed that the embouchures of the ravines, close under the range, have all the appearance of having once formed a sea beach. Mr. Burr adds, that "the fossiliferous strata are composed of a succession of horizontal layers of limestone, of greater or less purity, but generally containing a large proportion of sand, especially the lower beds which have been exposed to view, some of which are indurated sandstone, good for building, containing, when compared with the upper beds, but few fossil remains. These rocks are nearly white, or of a cream colour. The fossiliferous strata, which are considered to belong to the tertiary period, are generally covered with a deposit of soil and limestone, that does not contain any visible organic remains. This may have arisen from a gradual shallowing of the water by the rising of the land; for the tides and current in shallow water, would be more destructive to the remains of animals, than if they were deposited in mud in water of a greater depth. The surface soil, consequently, is such as might be supposed to arise by the

drying of an impalpable mud, formed of attrited shells and other matter, which had been subjected to the action of the tides in shoal water. The strata composing the tertiary formation contain beds of the sulphate of lime (gypsum), the nitrate of potassa, and bitumen."

The gypsum found is rather a sandstone, containing a sulphate of lime, formed by shells and other calcareous matter, which, from its affinity for the sulphuric acid contained in sea-water, and disengaged perhaps by extreme heat, or other agency, united to the lime, and left the silica nearly pure. Mr. Burr accounts for the nitrate of potassa, which is found in an efflorescent state on the surface of the rocks, by supposing that the potassa contained in the rocks united with the nitrogen of the atmosphere in hot and dry weather; and the bitumen from the decomposition of water by animal and vegetable matter.

The vast fossil bed which extends from about the meridian of 139°, with an imperfectly-known width, towards the western boundary of the province, and from the sea-mouth of the Murray to 32° 40' S. lat., indicates that a large extent of South Australia was, not long since, submerged. The strata are horizontal, surface level or slightly undulated, and the greatest elevation about 400 feet above the level of the sea. The upper stratum consists of beds of common oysters and oyster-shells, unbroken, three to four feet in thickness. Below this stratum there are deeper beds, of mixed coral, echini, pectoris, spiralis, and other small marine shells, generally much broken, and deposited in sand, limestone, and selenite, alternating with beds of sand without shells. At the base of these, or beneath them, are vestiges of fish, teeth, and nautili, four or five inches in diameter. Beds of excellent compact limestone occur sometimes in the fossil formation.

During the process of sinking wells at Adelaide, beds of oyster-shells, very perfect, were found forty feet below the surface; that is, seventy to ninety feet above the present ocean level.

Mr. Menge is of opinion that the terrace which occupies an undulated plain between the Barossa and Rawdon ranges, in some places about ten miles in breadth, has been caused by a pseudo-volcanic agency; that is, by hot springs: but, he adds—

"The hornstone within the Barossa range has nothing similar to it in Europe, where it is usually a

combination of quartz and felspar; whilst the South Australian hornstone combines quartz, magnesia, and lime, which produce a variety of siliceous minerals of which I have never seen anything alike. The rock itself turns not merely round its own character in different shapes and colours, but it includes, at the same place, jasper, cornelian, chalcedony, opal, woodstone, and siliceous tuffa, altogether more or less varied by accidental ingredients of iron, magnesia, and lime. Common jasper and opal jasper form strata and veins in hornstone, and occupy sometimes the whole place of the rock. Chalcedony and opal occur in veins, which are very numerous, and both are botryoidal where pores and caves occur in the veins, without the least disposition to crystallization. Crystallized substances, besides sulphuret of iron, seem to be combinations of magnesia and lime; as bidderspar, rheticite, grammatite, &c. Silver-white foliated talc spreads through the whole rock, but seldom through chalcedony, and very frequently through opal and siliceous tuffa. The last is sometimes perfectly like that from the Geysers, in Iceland. There are two different series of siliceous tuffa: the first is quartz, and begins with porous hornstone or chalcedony, and ends in a spongy mass, like pumice; the other is in connexion with opal, takes the shape of siliceous ghur or hydrophan, and ends in a kind of freestone. Opal occurs in great abundance, partly as milk opal, partly as wax opal, fire opal, common opal, semi opal, and precious opal. The fibres of asbestos, which run frequently through the opal, give it a chatoyant lustre, and the enclosed talc looks exactly like silver in the mass. Veins of opal run in almost every direction through the hornstone, as well as through siliceous tuffa, without regular stratification; and if they be once opened, we shall have precious stones in great abundance. Red and blue striped opal-agate appears sometimes on the surface with dendritic manganese, which seems to form a vein in the interior; but it is red and yellow opal jasper which occupies often the places of hornstone, or forms regular strata in it.

"The veins of chalcedony run partly through a compact hornstone, partly through porous hornstone, and partly through woodstone or fibrous hornstone, and sometimes through wood asbestos or rock wood. It forms a kind of oynx with woodstone and with opal in zones, and is generally blue, bluish-white, or yellow, and forms a transition, through a red colour, into cornelian. The milk-white chalcedony, with enclosed fibres of asbestos, forms the cat's-eye, which is of frequent occurrence in Amianth-place, as well as in Flaxman-valley."

This peculiar formation is frequently interrupted by strata and beds of magnetic iron ore and white marble, or magnesian limestone; and it seems to be cut off by a formation of porphyry in the Hernanion range.

Primitive limestone (white marble) is found in great abundance in the mountains east of Gulf St. Vincent. Mr. Menge met with fifteen hills of it within the Barossa range, along the formations of hornstone, magnetic iron ore, and talc, or of magnesian rocks. Some has been found as fine-grained as that of the celebrated Carara in Italy.

On *Cornflower hill*, the *table marble* is easily separated into flags of any size. In Flaxman valley, the primitive limestone abounds with magnetic iron ore. The western slope of the Barossa range, along the Angas Park, from Light Pass to Salem valley, is entirely white marble. Even the springs which irrigate German Pass are impregnated with carbonate of lime. Within the Belvedere range there are several strata of transition limestone. The limestone on the plains is full of shells in a petrified state, and was formed from the ocean; that on the tops of hills seems to have had its origin from the primitive limestone usually deposited on elevations, along with a breccia of quartz pebbles connected by bog iron ore, as the superstratum on the primitive slates.

The tertiary limestone seems to be spread over a large part of the southern and eastern coasts of Australia; not merely through its plains, and around its shores, but also on its elevations. These different formations of lime indicate abundance of minerals.

Mr. Menge, who has geologically examined the Uralian mountains, and seen there lumps of malachite, or carbonate of copper, weighing more than a ton each (found between primitive limestone and clay slate), and lumps of gold 20 to 25 lbs. weight each (found between primitive limestone and mica slate), is of opinion that the corresponding strata in Australia will yield equally valuable products. [See Supp^t.]

The lower slopes of all the mountain ranges are chiefly composed of slate; in the Mount Lofty range, generally *transition*, very much resembling the *greywacke* of North Wales. Proceeding to the east or southward, it becomes harder, and of a red colour; and still farther to the south, it appears as *flinty mica*, or *hornblende* slate. The surface of earth on the slate is always grassy. The summit of Mount Lofty is capped with highly ferruginous sandstone; and the Mount Barker range exhibits a conglomerate of ironstone and angular pieces of quartz. The ferruginous sandstone and ironstone conglomerate is marked by stringy bark forest or brush.

Throughout the Adelaide range, says Mr. Dutton, granite shews itself in different places, principally in the beds of rivers, or at the bottom of deep gullies; sometimes also forming some of the high peaks, as in the Barossa range. Other heights are capped with the old red sandstone; and a recent oolitic limestone covers the clay slate of

many of the lower hills. The rock formations of this main range are, generally speaking, the same throughout. The stratified primitive rocks on each side of both the gulfs St. Vincent and Spencer begin from Cape Jervis, and extend to the northward for about 200 miles: they are generally, according to Mr. Menge, accompanied by a formation of gneiss on one side, and another of clay slate on the other side. The gneiss is frequently interlined with extensive banks or strata of granite, which often run out into pure quartz; and the clay slate occurs in all its modifications in colour and mixture.

On the *Mount Remarkable* range, the prevailing rock is a very hard white sandstone; and on the west coast, a coarse red sandstone prevails. Governor Grey, who examined this district, was of opinion that the range of mountains as far as Mount Arden abounds in minerals.

The prevailing rock in the neighbourhood of Franklin harbour is gneiss, and the adjoining hills are probably full of minerals.

On the western side of the head of Spencer's gulf, the hills are of red sandstone, in strata nearly horizontal. In other countries this formation is associated with coal, which will most likely be found in this neighbourhood.

At Lipson cove, on the west coast of Spencer's gulf, the rocks observed by Colonel Robe, when governor of the colony, in December, 1846, consisted of gneiss and hornblende schist, nearly vertical, and having a due course north and south. At Port Lincoln, the Gambier islands, Althorpe island, and apparently the south-west extremity of Yorke's peninsula, the governor found stratified limestone of recent formation, horizontal, and similar to that of Adelaide, resting immediately on granite, without the interposition of the transition or other secondary rocks.

The country to the south and east of Lakes Victoria and Albert, as far as Cape Bernoulli, consists of domes of sand, which are supposed to rest on a granitic reef or barrier, as granitic rocks are visible above the sea at Capes Morad and Bernoulli, and at other points on the coast. It is, therefore, presumed to be continuous, although the connexion is not at present visible.

Further south, the sand hills cease; no granite, igneous, or hard rock appears; the coast-line is wider and less elevated, and there are numerous low swampy plains, sub-

ject to periodical inundations, and strewed with cakes of calcareous tufa, some as large, and closely resembling a ship biscuit.

The hills around the plains are of limestone, as are also the rocks of the surrounding country. In the vicinity of Mounts Gambier and Schanck, for about twenty miles, the geological features change, from tertiary limestone and calcareous sandstone, to coral limestone, with numerous beds of chert, a siliceous rock containing the remains of marine animals and coral. Throughout this coral limestone and level tract there are deep holes, or wells, containing fresh water, one of which, of an oval form, measured eighty yards in diameter; the depth to the surface of the water, twenty-eight feet and a-half; and the depth of the water, 103½ feet; the colour of an intense indigo-blue. These wells are all in the immediate vicinity or within twelve miles of the volcanic mountains; and in the same neighbourhood are caverns containing the bones and teeth of animals of a larger size than any at present living in Australia. Some are supposed to belong to gigantic kangaroos, others to the canine race.

The descriptions of Mounts Gambier and Schanck have been given in the topography. At the base of Mount Schanck, to the south-west, there is a large accumulation of cellular basalt, which is bare, and presents a steep wall towards the plain. At Mount Gambier there is black and red lava, generally cellular; coral limestone is exhibited in the cliffs of the lake in the middle crater, and upon this there is a stratum of basalt; whilst on the upper parts of the mountain, or on the rims of the craters, there is volcanic tuff, containing fragments of lava.

MINERALOGY.—The preceding details of the geological strata will serve to introduce a sketch of mineralogical combination discovered in South Australia. Mr. Menge, who was the first person to direct attention to the mineral riches of the province, says that a rock in Australia is not confined to a compound of earthy substances, as is generally the case in Europe, but that it is often identified with metals, minerals, precious or ornamental stone, or with some earthy substance fit for lithurgical use. He thus classifies them in South Australia according to their order as receptacles of mineral wealth:

1. *Granite*—composed of quartz, felspar, and mica. *Rocks* depending upon *granite*—porphyry, sienite, serpentine, and greenstone. *Minerals* depending upon *quartz*—

amethyst, chalcedony, chrysopras, and opal; ditto on *felspar*—Periklin, scapolithe, gawlerite, and topaz. Ditto on *mica*—talc, chlorite, plumbago, and ironrose. *Minerals inhabiting the rock of granite*—tourmaline (black and green), garnet, beryl or emerald, corundum, zircon. *Minerals in combination with granite rock*—usually (1) cobalt, with its associated metals, viz., bismuth, arsenic, silver, and antimony; (2) uranium; (3) tin, with its associated shelium or wolfram, molybdena, and zinc; (4) lead—with its associated silver and arsenic; (5) copper—associated with lead and copper.

Gneiss ranks second in order, and as it differs only from granite by its stratification (and in South Australia by the proportion of its constituent parts), similar metals and minerals are to be found as in granite, but the laminated structure leaves more room for them in gneiss. Where *quartz* predominates in gneiss, the rock attains considerable altitude. Where *felspar* is most abundant, a disintegration or decomposition takes place, and the metals, including the protoxides and peroxides of iron, are protruded on the surface; where *mica* is in excess, magnesia is produced, and by chemical combination indurated talc, usually called soapstone, appears. The Australian soapstone differs from the kind usually found in Europe; it resists the disintegrating powers of the atmosphere, becomes hard in the fire, and takes a polish similar to cast silver, which it retains, not being subject to tarnish.

Mica Slate ranks third in South Australia, and is very extensively distributed; it consists of quartz and mica, and wherever the quartz is not compact, but granular, the rock is easily dissolved, and becomes sand. The ores in this rock are chiefly iron-mica, specular iron, and brown iron ores.

Primitive Limestone, fourth in order, but first in importance because of its metallic riches, when combined with clay slate, contains copper, lead, and zinc; iron is found in nests, veins, stocks, and caves. When blended with quartz, it forms an excellent millstone.

Hornstone (a compact quartz), fifth, often accompanies primitive limestone, or clay slate, when it is found to contain considerable quantities of copper ores. In this formation are found many ornamental stones or quartzose substances; such as chalcedony, cornelian, jasper, opal, and hydrophane; also the amphibolic substances—*asbestos* and *grammatite*.

Clay Slate, the sixth and most extensive formation in South Australia, abounds in metals, particularly in iron, lead, silver, copper, manganese, gold, and zinc. The ores are mostly indicated by its stratified quartz. The colour of this formation is usually grey, but varying to white and to blue slate. Where the quartz predominates, it changes into siliceous slate or touchstone; where the clay is in excess, alum slate appears.

To the above general view of the rocks containing the metallic riches of South Australia, it may be useful to add a definition of some technical terms which it would have been scarcely possible to have avoided employing.

When speaking of minerals, miners distinguish the ores or lodes according to their situation in the metalliferous ranges; thus (1) *strata*, or stratified ores running parallel with the rock; (2) *veins* crossing rocks at different angles; (3) *stocks* filling vertical caves in the rocks; (4) *reins* and *nests* scattered in masses; (5) *labyrinths* in zigzag or curved lines; (6) *chains* in links and scattered, and (7) *vaults*, heaped up in horizontal caves within the rocks. Copper ores in this last-named position are usually found lying loose, or in distinct heaps, whilst the rock is dissolved around.

The mineral and geological specimens which have been discovered up to the year 1846, are thus classified; I give the list, as prepared by Mr. Burr, in evidence of the internal resources of the province:—

IRON.—*Sulphurets.*

Rapid Bay;—general in the ranges, in limestone, quartz, hornstone, slates, and associated with other metalliferous minerals. Iron pyrites, crystallised in cubes and uncrystallised.

Montacute Copper Mine, and the metalliferous districts in its neighbourhood, Rapid Bay, Encounter Bay, &c. Iron pyrites, crystallised in pentagonal dodecahedrons.

Oxides.

Mount Gawler Range, Barossa Range, Mount Lofty Range, very general. Specular iron ore, massive, and lamellar, and granulated.

Near the Montacute Copper Mine. Brown hæmatite, radiated and fibrous.

Rapid Bay, Mount Barker, near the Montacute, and various other places. Brown hæmatite, compact.

Very general. Bog iron ore, and other earthy oxides of iron.

Very general, from Cape Jarvis to Black Rock Hill. Magnetic iron ore, crystallised and massive, varieties Sienite.

Light River. *Carbonate.* Carbonate of iron.

Rapid Bay, Barossa Range, Mount Lofty Range, and various other places. *Phosphate.* Phosphate of iron. earthy.

Near Mount Rufus, and near Strathalbyn.

MANGANESE—*Oxides.*

Rapid Bay, Myponga, the Horseshoe, Onkaparinga.	Black oxide of manganese, fibrous, diverging.
Rapid Bay, Light River, &c., &c.	Black oxide of manganese, massive.
Rapid Bay, Barossa Range, Mount Bryant, &c., &c.	Siliceous oxide of manganese.

EARTHY MINERALS—*Siliceous.*

Near Encounter Bay.	Quartz in dodecahedrons, with isoseles triangular faces.
In veins, generally amongst the metalliferous strata.	Quartz in hexagonal prisms with summits.
Near the Montacute Copper Mine, Flaxman's Valley.	Quartz in minute hexagonal prisms with summits.
Very general among the metalliferous strata; the cleanest specimens are from the neighbourhood of Mount Barker, the Barossa and Belvidere Ranges.	Quartz vein.

Belvidere Range.	Quartz vein, smoky.
Near the Montacute Copper Mine.	Quartz crystallised, rose-coloured.
On the Reach, at Rivoli Bay, at Mount Gambier.	Flint in nodules, black (not the chalk flint).
Barossa Range, Flaxman's Valley, twenty-five miles north-east of Adelaide.	Hornstone.
Flaxman's Valley.	Woodstone.
Flaxman's Valley.	Opal, brown, blue, milk white, wood, green, magnesian, brimstone-coloured, and other varieties, some with asbestos.

Belvidere Range.	Jasper opal.
Barossa and Belvidere Ranges.	Jasper, varieties.

Flaxman's Valley.	Chalcedony, blue.
Flaxman's Valley, and near Mount Barker.	Chalcedony, botryoidal.

Barossa Range.	Chalcedony, red, with opal.
Near the Kapunda Copper Mine.	Chalcedony, with jasper.

Flaxman's Valley.	Agate, red and blue striped, and moss.
Belvidere Range.	Prehnite, or zeolite, mammillated.

Barossa Range.	Prehnite, crystallised.
Belvidere Range, in the neighbourhood of Mount Barker.	Garnet, red.

About twenty miles north-east of Mount Barker.	Garnet, black (grenat noir).
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Belvidere Range.	Cinnamon stone.
Mount Gambier.	Augite.
Mount Gambier.	Coccolite.
Belvidere Range, near Mount Barker, Flaxman's Valley, Encounter Bay, Strathalbyn, &c., &c.	Hornblende.

Flaxman's Valley, Barossa Range.	Grammatite, or tremolite, in limestone and in dolomite.
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Lynedoch Valley, Flaxman's Valley.	Actynolite, green and brown, lamellar.
Flaxman's Valley.	Actynolite, green and brown, capillary.

Flaxman's Valley.	Actynolite, white.
Near Strathalbyn.	Actynolite, brown.

Belvidere Range.	Amianthus, or asbestos, flexible and common, occasionally traversing and woven through other minerals, as opal, hornstone spars, &c., &c.
Near Mount Barker.	Asbestos, with chalcedony, and siliceous tuffa.

Flaxman's Valley, and east of Mount Barker.	Rock wood.
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Aluminous.

Barossa Range.	Fibrolite.
Belvidere Range.	Sappare, or kyanite, flowery, foliated, white and green.

River Gawler.	Clay, yellow, red, and white
Flaxman's Valley.	Clay, white, indurated.
South Adelaide.	Clay, variegated, unctuous.
Near Mount Barker.	Clay, variegated, red, white, and blue.

North Adelaide, 125 feet below the surface.	Pipe clay, red, white, and pink.
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Gawler Plains.	Pipe clay, white.
Sources of the Angas.	Pipe-clay, white and pink.
Crystal Brook.	Clay, yellow and green.

North Adelaide, eighty feet below the surface.	Clay, blue, with iron pyrites.
Belvidere Range.	Alum slate and alum stone.
Near Mount Lofty.	Clay, green, indurated.
Mount Lofty Range.	Alum slate.

ALKALINE, EARTHY MINERALS—*Schorl, or Tourmaline, &c.*

Valley of the Nixon, near Encounter Bay.	Schorl, acicular.
Barossa Range.	Schorl, in nine-sided prisms with summits.

Encounter Bay.	Schorl, in prisms, with yellow mica.
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Seven miles north-west of Mount Barker.	Schorl, black and green, in granite.
Barossa Range.	Schorl, black and green, in granite.

Near Rapid Bay, twenty-five miles north-east of Adelaide, and various places.	Schorl, varieties.
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Valley of the Nixon.	Rubellite.
Barossa Range.	Beryl.
Barossa Range.	Epidote.

Talc.

Belvidere Range.	Earthy talc.
River Hutt, and twenty-five miles north-east of Adelaide.	Silver-white foliated talc.

Lynedoch Valley.	Indurated white, red, and yellow talc.
Twenty-five miles north-east of Adelaide.	Indurated red talc.

Barossa Range.	Green, foliated, indurated talc.
Mount Lofty Range.	Glanular talc, nacrite.
Belvidere Range.	Nacrite.

Mica.

River Gawler, twenty-five miles north-east of Adelaide, Valley of the Nixon, Barossa Range.	Mica, white, flowery
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Barossa Range, Valley of the Nixon.	Mica, black.
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Barossa Range	Iron mica.
Yankalilla.	White foliated mica, in large leaves

Felspar.

Barossa Range.	Felspar, foliated, glassy, and flesh-coloured.
East of Mount Barker.	Felspar, flesh-coloured.
East of Mount Barker.	Felspar, granular.

ACIDIFEROUS, EARTHY MINERALS.

Cliffs of the River Murray, and at Brighton, near Adelaide.	Sulphate of lime (gypsum), foliated.
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Cliffs of the River Murray.	Sulphate of lime, in the form of shells.
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Occasionally in small quantities, with ores of copper at the Kapunda Mine.	Fluate of lime, in cubes, with the edges and angles replaced.
Rapid Bay, Barossa Range, Belvidere Range.	Dolomite

Barossa Range, Belvidere Range, Rapid Bay, near Mount Barker.	Bitter spar.
North-east of Adelaide, Rapid Bay.	Pearl spar.

Rapid Bay, Barossa Range.	Carara marble.
Rapid Bay, near Mount Barker, and ten miles north-east of Adelaide.	Marble, white, fine

About twelve miles north-east of Adelaide.	White marble, and veined white and pink.
River Hutt, Barossa Range, near Mount Barker, Rapid Bay.	White crystalline limestone, coarse-grained.
Rapid Bay.	White and grey slaty limestone.
Rapid Bay, near Mount Barker.	Grey limestone, compact.
Near Mount Arden.	Variogated compact limestone.
Near Mount Gambier.	Compact limestone
Near Mount Gambier and Mount Schanck.	Coral limestone.
Plains near Cape Jaffa.	Compact limestone, with fossil remains of univalve shells.
Salt Creek.	Arenaceous limestone, with fossil remains of shells, partly bivalve.
Over the whole of the country described as tertiary and recent.	Fossil limestone.
Dunes of sand on the Coorong.	Calcareous sandstone, in flags.

The chief ores of some of the principal mines in South Australia, are stated to be as follows:—

Kapunda Copper Mine.—The best varieties of sulphurets, as vitreous copper or copper glance, purple copper ore, grey copper ore, the black sulphuret of copper, and the blue and green carbonate of copper, which are generally mixed with earthy matter. These have formed the principal ores which have been exported; but there has also been a considerable quantity of the muriate of copper, and native copper, crystallised in octahedrons.

Burra-Burra Copper Mine.—The protoxide of copper, or ruby copper ore, and carbonate of copper. The protoxide of copper is generally in veins, of greater or less thickness, traversing the oxide of iron; some of the mixed specimens from the Burra-Burra mine are exceedingly beautiful. A rich ferruginous, red oxide of copper has also been procured in considerable quantities. The sulphurets of copper are scarce.

Montacute Copper Mine.—Copper pyrites, generally variegated. Carbonate of copper is also met with, and some of the finest specimens of this ore have been from the Montacute mine.

Rapid Bay.—Ores of copper similar to those of the Montacute mine.

Mount Barker Copper Mine.—Ores a red oxide, containing a small portion of iron and silica, and the blue and green carbonate of copper, generally earthy.

Copper Mine about twenty miles north-east of Mount Barker.—A good kind of the sulphuret of copper, variegated.

Wakefield Copper Mine.—The carbonate of copper, with iron ore, and sulphate of barytes.

Glen Osmond Lead Mines.—The sulphurets, or galena, crystallised in cubes, and granular; and the corneous lead ore, a murio-carbonate of lead.

Rapid Bay.—Galena in cubes, and blue lead ore pulverulent.

Yorke Peninsula, between Gulfs St. Vincent and Spencer, is said to contain abundance of minerals; and in the district of Franklin harbour, 150 miles north of Port Lincoln, varieties of the blue and green carbonate of copper have been recently discovered.

The length and breadth of some of the lodes of copper in South Australia, surpass anything of the kind, even in South America; at the celebrated *Burra-Burra* mines, in particular (see map), the metal “crops out” of the surface in such quantities, that hundreds of tons may be removed without sinking a shaft; it resembles *quarrying* in metal, rather than mining. In one place, where a shaft has been sunk, it seems like working in a bed of solid copper.

Lead, in the same manner, especially at the *Wheal-Watkins* mine, has been found “cropping” through the surface; the ore of this mine sent to England, yielded seventy-five per cent. of lead, and about 30s. of silver to the ton of ore, which may be raised at the mine at less than 20s. per ton.

Several other minerals have been found, as well as copper and lead. Native gold, containing a small portion of silver, exists about half a mile north of the Montacute copper mine, ten miles north-east of Adelaide. It is also said to be obtainable in several other places. I have seen some fine grains of gold interspersed with black sand, said to have been found in the bed of the Torrens river. Further details will be given, when examining the staple products of the province, and in the Supplement.

THE SOIL, of course, varies throughout a wide extent of country; that on which the city of Adelaide is built is remarkable for containing in abundance the elements necessary for vegetable production. In North Adelaide every kind of English and tropical fruit may be found growing in perfection; the banana and the gooseberry side by side. The produce of the fruit-trees is no less abundant in quantity than rich in flavour: yet the appearance of the soil would scarcely indicate such a favourable return to the industry of man.

A portion of the surface soil, and of the subsoil, taken from the garden (which had not been manured) of Mr. George Stephenson, in North Adelaide, was brought to England by Mr. Dutton, and submitted to analysis by Dr. Ure (23rd of February, 1846), when the following results were produced:—*Surface soil*—Sulphate of lime, or gypsum, 75; phosphate of lime, 2; moisture, 2; combustible vegetable matter, 2; oxide and phosphate of iron, 6; fixed alkaline salts, containing some of the valuable potash salt (these are muriates of soda and potash), 4.5; silica and a little alumina, 8.5; a trace of magnesia; = 100. *Subsoil*—Sulphate of lime, 53.33;

phosphate of lime, 2; oxide and phosphate of iron, 5.50; moisture expelled at red heat, 15; fixed alkaline salts, 3.50; silica, with a little alumina, 20.67; a trace of magnesia; = 100. This distinguished chemist says, "I have devoted much time and pains to the analysis of the soils; they are the most singular I have ever examined, or even heard of: they must be very fertile, as they contain all the elements necessary for the nourishment of plants."

Dr. Ure examined samples of wheat and barley from Adelaide, and determined their value by the specific gravity of the corn, which he compared with English prize wheat, thus:—wheat from South Australia, specific gravity, 1.400; English prize wheat, 1.340; barley of Adelaide, 1.285. The nutritive quality of the soil of South Australia, as evinced in the growth of grain, is greater than that of England.

The extent of limestone formation in the colony would indicate an abundance of arable land; while the slate formation furnishes a great variety of pastoral districts. It is probable that, in future years, the amount of cultivable soil will be largely increased in Australia, by reason of diminished terrestrial heat, owing to the more rapid disintegration of calcareous rocks, cooling in the surface of the earth, a clearing of the indigenous forests, less immediate absorption of the periodical rains, and a greater retention of surface-water, indispensable in an Australian climate for pastoral and agricultural pursuits.

CLIMATE.—South Australia, from its latitudinal position, absence of snow-clad mountains, and, as regards Adelaide, from its inland situation, has a higher temperature than Melbourne, and may be said to range more nearly with Sydney, New South Wales, with Perth in Western Australia, and with Palestine in Asia Minor. It is very salu-

rious; and, as the soil becomes more cultivated, will probably possess a more equable thermometrical range. The southerly winds, which prevail for the greater part of the year, arrive cool and refreshing from the Pacific, and have an exhilarating influence. During winter (June, July, and August) hoar-frosts occur at Adelaide. The atmosphere of South Australia is an excellent remedial agent for alleviating the diseases of Europe or of Asia.

The general temperature of Adelaide is somewhat higher than that of Perth, the capital of Swan River, as shown by the following abstract of observations of the thermometer of Fahrenheit, in the year 1844:—

Months.	Adelaide.		Perth.		Difference.	
	Max.	Min.	Max.	Min.	Max.	Min.
January . .	101	66	97	52	4	14
February . .	103½	64	100	67	3½	17
March . . .	95	64	89	48	6	16
April . . .	86	53	87	35	1	18
May	76	50	72	37	4	13
June	68	48	65	30	3	18
July	60½	48	61	31	0½	17
August . . .	68	48	58	31	10	17
September . .	70½	49	68	36	4½	13
October . . .	96½	50	78	40	18½	10
November . .	93½	53	92	40	1½	13
December . .	103½	53	96	41	7½	12

The mean quantity of rain falling, throughout the year, in the following places, is—in Adelaide, 20 inches; Hobart Town, 19; London, 21; Manchester, 36; Liverpool, 34; Launceston, 40; Kendal, 53; Dumfries, 36; Glasgow, 21; Arracan, in July and August, 103; Tropics generally, 115; Bombay, 106; West of England, 57. Annual variation in London, 75 per cent.; Adelaide, 38.

The annexed meteorological register is for Adelaide:—

Month.	Temperature.			Mean Temperature at Noon.	Rain.		Winds.		
	Highest	Lowest			Days.	Inches.	Hot.	Warm.	Cool.
November, 1839 . .	73° 82° 75°	58° 60° 53°		68°	14	3.330	0	10	23
December	94 106 95	62 65 52		82	5	.345	1	14	21
January, 1840 . .	92 103 87	65 74 66		87	3	.335	2	5	26
February	80 94 79	70 68 64		82	5	2.010	3	3	20
March	71 100 88	66 17 64		71	7	.445	2	13	27
April	74 91 77	53 62 57		75	10	1.119	0	17	25
May	60 81 63	50 61 55		69	8	1.597	0	25	13
June	54 69 55	48 58 51		60	11	3.247	9	24	11
July	50 96 55	48 58 51		62	8	1.900	0	25	10
August	63 78 67	52 54 48		62	16	3.040	0	24	11
September	70 83 67	49 54 52		65	16	4.540	0	22	11
October	76 84 83	60 56 62		79	6	1.900	1	21	16

The following is an abstract of the rain-gauge kept in Adelaide for the seven years ending December 31, 1846:—

Months.	Average Days.	Maximum.	Minimum.	English Average.
WINTER:—				
May . . .	11	3.58	0.25	1.85
June . . .	11	3.70	1.72	1.83
July . . .	14	3.66	0.86	2.52
August . . .	16	4.77	1.66	1.45
September . . .	11	4.64	0.44	2.19
October . . .	10	2.74	0.94	2.07
SUMMER:—				
November . . .	8	3.31	0.02	2.40
December . . .	5	3.82	0.35	2.43
January . . .	4	0.45	0.21	1.48
February . . .	4	2.01	0.35	0.75
March . . .	5	1.00	0.44	1.44
April . . .	10	3.58	0.38	1.79

The following abstract of a table, carefully compiled from the meteorological journal in the land-office, for the years 1844, 1845, and 1846, by permission of the government authorities, and extended back to 1839 by private observations, will exhibit the manner in which the warm and cold winds are distributed on this coast during the summer and winter months:—

Months.	Hot.	Warm.	Cool.
SUMMER:—			
November	—	9	21
December	1	8	22
January	2	4	26
February	3	3	23
March	1	6	24
April	2	11	14
WINTER:—			
May	2	20	9
June	—	20	10
July	—	22	9
August	—	23	8
September	—	20	10
October	1	13	17

The salubrity of the province is shewn in the returns of births and deaths.

Return of Births which have taken place.

Year.	Registered.	Unregistered.	Total.
1840	416	30	446
1841	544	30	574
1842	641	60	701
1843	650	60	710
1844	671	60	731
1845	708	100	808
1846	937	200	1,137
1847	994	200	1,194
1848	—	—	—
1849	—	—	—
1850	—	—	—

Note.—The unregistered return is below the official estimate.

Return of Births and Deaths to Inhabitants.

Year.	Inhabitants to One Death.	Inhabitants to One Birth.
1840	39.8	32.7
1841	66.5	26.5
1842	76.5	23.0
1843	111.3	24.5
1844	139.8	26.0
1845	100.3	27.6
1846	80.0	24.6
1847	63.9	25.9
1848	—	—
1849	—	—
1850	—	—

Comparison of Births and Deaths to Inhabitants in other Countries.

Countries.	Inhabitants to One Death.	Inhabitants to One Birth.
England	46.4	35.2
Russia	33.0	25.5
France	33.0	27.0
Netherlands	27.5	21.0
Italy	24.4	30.6

We have no return of the maladies treated in the Government Hospital at Adelaide, or of their proportionate mortality; the following shews the number of patients treated in the Government Hospital during the years 1844, 1845, 1846, and 1847:—

Year.	Admitted on payment of Fees.	Admitted without Fees.	Discharged.	Died.
1844	4	34	30	8
1845	15	50	53	12
1846	13	64	61	16
1847	30	109	120	15

The subjoined table is an abstract of the register of interments at Adelaide, from 1844 to 1847:—

Month.	1844.			1845.			1846.			1847.		
	Adult.		Children	Adult.		Children	Adult.		Children	Adult		Children
	M.	F.		M.	F.		M.	F.		M.	F.	
January	2	2	8	0	2	16	1	1	13	4	5	36
Feb.	4	2	6	3	3	21	7	2	40	11	7	45
March . . .	1	1	7	2	0	26	3	2	28	5	6	27
April . . .	1	2	9	3	4	12	6	6	19	8	5	21
May . . .	1	2	11	3	1	9	9	2	26	11	3	23
June . . .	2	3	6	9	1	7	9	3	14	4	6	15
July . . .	1	2	3	5	3	6	1	4	10	9	6	9
August . . .	4	3	6	2	3	8	9	1	7	7	1	22
Sept. . . .	0	2	3	2	4	4	3	2	13	15	2	29
October . . .	4	3	6	4	4	8	3	3	15	5	7	20
Nov. . . .	4	1	8	7	1	7	4	4	26	11	2	25
Dec. . . .	3	2	11	11	6	16	7	4	36	9	9	25
Total . . .	27	25	84	51	22	140	67	34	247	99	59	327

Note.—The population in these years was—1844, 18,999; 1845, 22,390; 1846, 28,000; 1847, 31,000. The two last years are an approximation.

CHAPTER III.

POPULATION, CLASSIFIED AND BY DISTRICTS—RELIGION—EDUCATION—NEWSPAPER PRESS—CRIME—LAWS—GOVERNMENT—NEW CONSTITUTION—LIST OF LIEUTENANT-GOVERNORS.

THE colonizing character of the British race was never more strikingly manifest than in the province we are now examining. Fifteen years ago there was not an Englishman in South Australia; now (July, 1850) there are about 50,000 happy, prosperous, and loyal subjects of Queen Victoria in the settled portions of the colony; of whom about 5,000 are Germans, and the remainder immigrants from England, Wales, Scotland, and Ireland, and their descendants.

On the 9th of November, 1836, the first vessel arrived, with emigrants from England, at Glenelg, between five and six miles distant from the site of the present city of Adelaide. The subsequent augmentation of the population of the colony is thus shown:—

Year.	Males.	Females	Total.	Aborigines, estimated.
1837	—	—	200	—
1838	—	—	5,000	1,600
1839	—	—	9,000	1,600
1840	—	—	10,000	1,600
1841	—	—	14,600	1,600
1843	—	—	16,516	1,600
1844	9,526	7,670	17,366	1,600
1845	12,388	9,371	21,759	1,600
1846	14,711	11,182	25,893	1,600
1847	17,531	13,622	31,153	3,680
1848	21,527	17,139	38,666	3,730
1849	—	—	—	—

According to the government census of 1844, the ages and sex of the population in the colony was—

Age.	Males.	Females.	Total.
Under 2 years . . .	890	834	1,724
2 to 7 " . . .	1,459	1,434	2,893
7 to 14 " . . .	1,322	124	1,446
14 to 21 " . . .	922	866	1,788
21 to 45 " . . .	4,432	2,996	7,428
45 to 60 " . . .	457	281	738
60 and upwards . .	44	18	62

Of married—males, 3,026; females, 3,032.

The classification by occupations showed—professional persons, landed proprietors, merchants, and bankers, 990; shopkeepers or retailers, 319; mechanics and artificers, 986; shepherds, &c., 763; stockmen in care of cattle, 298; gardeners and farm servants, 1,838; domestic servants, 742; others, not

included in the foregoing, 11,260. Classed by religion—Church of England, 9,418; Church of Scotland, 1,691; Wesleyans, 1,666; other Protestant dissenters, 3,309; Roman Catholics, 1,055; Jews, 25; Mahomedans and Pagans, 32. The number of houses was—of stone or brick, 1,346; wood, 1,142; other materials, 903 = 3,391.

Population of Adelaide and the neighbourhood in 1844 and 1846.

—	Males.	Females.	Total.
Port Adelaide	717	623	1,340
North Adelaide	840	800	1,640
South Adelaide	2,299	2,138	4,437
South-west of Adelaide . . .	880	813	1,693
South-east of Adelaide . . .	535	478	1,013
East and North-east of Adelaide	362	314	676
Total in 1844	5,633	5,166	10,799
„ in 1846	6,826	6,214	13,040

Abstract of the Census in April, 1846.

Districts.	Area in sq. miles.	Males.	Females.	Total.
Milner Spe. Survey	600*	706	493	1,194
N. of Gawler Town	2,300*	348	110	458
Wakefield and Hutt	8,500*	631	131	762
Moorundie	100*	58	8	66
Wellington	200*	93	12	105
Mount Crawford	400*	320	210	530
Little Para River	210	462	369	831
Port Adelaide	48	816	713	1,529
North Adelaide	27	929	914	1,843
South Adelaide	4	2,902	2,668	5,570
S.W. of Adelaide	45	965	892	1,857
S.E. of Adelaide	31	688	584	1,272
E. and N.E. of Adel.	45	526	443	969
Sturt and Onkaparinga Rivers. }	68	212	176	388
O'Halloran Hill, &c. }	50	392	320	712
S. of Onkaparinga }	67	334	248	582
Sources of ditto	210*	780	672	1,452
Meadows Special Survey }	162*	301	243	544
Finniss and Angas Special Survey }	247*	308	167	475
Encounter Bay, &c.	240	158	107	265
Port Lincoln	—	85	47	132
Kangaroo Island	1,500*	—	—	70
N. of Rivoli Bay	2,700*	230	21	251
S. of Rivoli Bay	8,400*	248	15	263
Yankallilla, &c.	110	91	47	138
Cape Jervis	200	92	40	132
Total	26,464	12,670	9,650	22,390

Note.—Marked thus (*) are uncertain. Census of 1851 given in *Supplement*.

344 POPULATION; BIRTHS AND DEATHS IN SOUTH AUSTRALIA.

NUMBER OF EACH AGE.—*Males*.—Under two years of age, 1,019; two and under seven, 2,143; seven and under fourteen, 1,606; fourteen and under twenty-one, 1,088; twenty-one and under forty-five, 6,111; forty-five and under sixty, 629; sixty and upwards, 74. *Females*.—Under two years of age, 953; two and under seven, 2,101; seven and under fourteen, 1,460; fourteen and under twenty-one, 981; twenty-one and under forty-five, 3,696; forty-five and under sixty, 410; sixty and upwards, 49.

MARRIED OR SINGLE.—*Males*.—Married, 3,847; single, 8,823. *Females*.—Married, 3,811; single, 5,839.

RELIGION.—Church of England, 11,945; church of Scotland, 1,958; Lutheran church, 1,524; Wesleyan methodists, 2,246; other protestant dissenters, 2,888; Roman catholics, 1,649; Jews, 58; Mahomedans or Pagans, 52.

OCCUPATION.—Land proprietors, merchants, bankers, and stockholders, 1,152; clerks and overseers to the above, 162; professional persons, 109; clerks and assistants to the above, 35; manufacturers, brewers, millers, 82; clerks and assistants to the above, 46;

shopkeepers and other retail dealers, 338; clerks and assistants to the above, 160; brickmakers, 77; bricklayers, 83; smiths, 152; carpenters and joiners, 362; masons, 92; shoemakers, 225; cabinetmakers, 24; plasterers, 38; harness-makers, 19; tailors, 62; tanners, 19; miners, 269; sawyers and splitters, 240; shepherds and others in charge of sheep, 1,120; stockmen and others in charge of cattle, 215; carriers and their assistants, 134; gardeners, farm-servants, and persons employed in agriculture, 1,492; mariners and fishermen, 85; domestic servants, 818; labourers not included in the above definitions, 726; all other persons not included in the above, 13,993.

HOUSES.—Stone or brick, 1,715; wood, 1,272; other materials or tents, 1,189 = 4,176.

On the 1st of January, 1848, the population of the colony was about 38,666 souls; on the 1st of January, 1849, it was 45,907; it is now estimated at not less than 50,000.

The following is an analysis of the increase since the commencement of 1845:—

Description of Increase.	1845.	1846.	1847.	1848.
Immigrants whose passage was defrayed from the land fund	172	1,469	3,257	6,622
Excess of immigrants arriving at their own cost, over emigrants from the Province	2,118	2,088	1,504	
Excess of births over deaths registered	470	577	499	
Total	2,760	4,134	5,260	7,513

The following is a comparative return of the number of births, marriages, and deaths:

Births.

Sex.	1844.	1845.	1846.	1847.	1848.
Males	354	380	483	544	—
Females	317	328	454	450	—
Totals	671	708	937	994	1,239

The proportion of male to female deaths is thus shewn:—

Sex	1844.	1845.	1846.	1847.	1848.
Males	75	143	208	301	—
Females	63	95	152	194	—
Total	138	238	360	495	—

Marriages.

Solemnized.	1844.	1845.	1846.	1847.	1848.
Church of England	57	77	139	218	—
Church of Scotland	21	29	21	20	—
Roman Catholic Chapel	10	10	17	45	—
German Lutheran Church	6	2	17	22	—
Congregational Chapel	11	9	13	23	—
Methodist Chapel	2	11	10	7	—
Primitive Methodist Chapel	—	—	2	2	—
By Dep. Registrar, Adelaide	1	—	—	—	—
" Port Lincoln	—	3	—	—	—
" Missionaries	—	—	—	9	—
Of the Jewish Religion	—	—	—	1	—
Totals	108	141	219	347	320

Deaths.

Age.	1844.	1845.	1846.	1847.	1848.
7 Years and under	81	147	244	317	—
From 7 to 14 years	4	8	15	20	—
" 14 to 21 "	4	6	6	16	—
" 21 to 30 "	17	19	19	39	—
" 30 to 40 "	20	28	31	53	—
" 40 to 50 "	6	22	26	32	—
" 50 to 60 "	5	3	12	12	—
" 60 to 70 "	2	3	5	4	—
" 70 to 83 "	1	2	2	2	—
Total	140	238	360	495	510

The preceding returns merely show the number of births, marriages, and deaths actually registered in the province; there is, at present, no satisfactory means of estimating the number of those unregistered.

RELIGION.—It is gratifying to observe that from the very foundation of South Australia as a colony, a right appreciation has been evinced of the value of the ordinances of our holy religion; the first emigrants were accompanied by a minister of the gospel, and a church (in frame) for the celebration of religious worship, was forwarded from England. The late Rev. C. B. Howard, colonial chaplain, arrived in the colony, with Governor Hindmarsh, in December, 1836. His ministrations were gladly accepted, his person much respected, and to this worthy disciple of the cross we owe the foundation of the church of Christ in South Australia, which is now the seat of an episcopate of the church of England and of the church of Rome. The church of England bishopric was endowed in 1847 by one of the munificent grants

prompted by the practical piety of Miss Burdett Coutts, a lady whose name cannot be mentioned without adding the passing tribute of respect due to her from every British sub-

ject really interested in the abiding welfare of his country.

The relative numbers and position of the different denominations is thus shown:—

Return of the Number and Description of Places of Worship in South Australia, which specifies the locality, amount of accommodation, and average congregation of each.

Denomination.	Adelaide.	Port Adelaide.	Villages near Adelaide.	Willunga District.	Encounter Bay.	Gawler Town.	Koorringa.	Mount Barker.	Totals in 1847
Church of England:									
Places of worship . . .	2	1	2	—	—	1	—	3	9
Adapted to contain . . .	1,050	200	310	—	—	260	—	330	2,150
Average congregation . . .	750	120	160	—	—	80	—	200	1,310
Church of Scotland:									
Places of worship . . .	2	—	—	—	—	—	—	—	2
Adapted to contain . . .	750	—	—	—	—	—	—	—	750
Average congregation . . .	200	—	—	—	—	—	—	—	200
Dissenting Chapels:									
Places of worship . . .	9	1	16	3	1	4	1	4	39
Adapted to contain . . .	1,950	100	1,640	350	100	1,060	240	440	5,850
Average congregation . . .	1,230	80	660	145	30	790	240	220	3,395
Society of Friends:									
Places of worship . . .	1	—	—	—	—	—	—	—	1
Adapted to contain . . .	100	—	—	—	—	—	—	—	100
Average congregation . . .	12	—	—	—	—	—	—	—	12
Roman Catholics:									
Places of worship . . .	1	—	—	1	—	—	—	—	2
Adapted to contain . . .	700	—	—	150	—	—	—	—	850
Average congregation . . .	530	—	—	50	—	—	—	—	580

Since the foregoing return was made, several other temples dedicated to the worship of the one true and living God have been erected, and others are in progress; the structures are neat, and the pews, &c. formed of cedar-wood. Due provision has therefore been made by every class of Christians, among whom entire harmony prevails, much to the benefit of practical Christianity, and its essential attributes of charity, peace, and good-will to all. Public worship is celebrated twice on Sunday, the religious festivals of the year are kept as in England, and nearly every church and chapel has a Sunday-school attached.

The state of the religious denominations in 1848, irrespective of the church of England, is thus shewn:—

The *Presbyterians* are divided into the *Scotch Church* and the *Scotch Secession* (voluntary) *Church*.

The *Independents* have five chapels and ministers, and five Sunday schools, consisting of about 600 children.

The *Wesleyan Methodists* have twelve chapels, also schools and branch societies in many places throughout the province. The out-stations are visited from time to time by ordained ministers, who are assisted in their arduous labours by thirty local preachers, and by the employment of this lay agency faci-

ties are afforded for supplying the wants of a scattered community.

The *Primitive Methodists* have five chapels, about 220 scholars in their Sunday schools, and several excellent local preachers, superintended by an exemplary itinerant minister.

The *Baptists* and "*Immersed Believers*," two chapels; the *Christian Brethren*, two chapels; the *Union* denomination, five chapels; the *New Church* or *Swedenborgians*, one chapel, and the Jews a Synagogue.

The *Roman Catholics* have five chapels, and their church is confided to the superintendence of a suffragan bishop under the metropolitan hierarchy of Sydney, New South Wales. Considerable sums have been subscribed towards the erection of a cathedral at Adelaide; and at a public meeting called by their bishop the Roman Catholics unanimously resolved to forego any further participation in the support or assistance provided by an act of the colonial legislature, deeming it inexpedient and incompatible with Christian liberty to comply with the stipulations appended to the grant. The indefatigable bishop and ministers of the Roman Catholic church are very zealous in their efforts for education, and in the maintenance of their faith.

The German immigrants who abandoned their native land chiefly on account of the

religious persecutions to which they were subjected, and who belong, for the greater part, to the evangelical Lutheran church, have places of worship and pastors for their settlements of Klenzig, Hahndorf, Langmeil, Lobenthal, and Bethany. Each place of worship has a school attached, and the members of the church are required to send their children regularly to the same, from the sixth to the fourteenth year of their age. There are three or four German pastors in the colony; indeed each body of emigrants is accompanied by a minister from their "fatherland."

In June, 1849, the services of the church of England were celebrated in twenty places; of the church of Scotland in four; of the Roman catholic in three; of the society of Friends in one; and by the other denominations of Christians (of whom the Wesleyans are the most numerous), in forty-eight chapels; making, in the whole, seventy-six places of worship in this still infant colony. The government have granted 284 acres of land for the sites of churches, chapels, cemeteries, glebes, and schools, on fourteen applications from the church of England, two from the church of Scotland, two from the Wesleyans, and four from the Roman catholics. Since the foundation of the colony, the local government has contributed £2,157 towards the erection of church of England edifices, and private individuals, £16,689. The amount of the several sums subscribed by other denominations is not known. [Present state of religion in Suppt.]

An ordinance (No. 10, of 1847), was passed by the local government, to promote the building of churches and chapels for Christian worship, and to provide for the maintenance of ministers of the Christian religion. This ordinance came into operation 1st April, 1848, and was to continue to 1st April, 1850. Up to June, 1849, the church of England had received, under the provisions of this ordinance, in aid of erections, £1,325; in aid of clergy stipends, £464: church of Scotland, £300 and £68: Wesleyan church, £94 and £153: making in all, for ecclesiastical buildings and stipends, £2,406. The aid is issued to the extent of £50, in cases where the population being equal to fifty persons, a sum not less than £50 has been raised by private contributions for a church, chapel, or minister's dwelling; and the issue may be increased to any sum not exceeding £150, provided an equal or greater amount of pri-

vate contribution shall have been paid up and deposited, or secured to the satisfaction of the governor and executive council. The aid to the stipend of the minister is fixed at rates having reference to the number of sittings (one-fourth part being free of any charge), rented and paid for in any church or chapel; the stipend, however, in no case exceeding £200 per annum. The *South Australian Church Society*, in connexion with the church of England, has an income of about £500 a-year arising from donations and subscriptions; and its objects are the assisting in erecting churches, and maintaining religious worship and Christian education in the metropolis and in the rural districts of the colony. The *Australian Mining Company of London* have built a chapel and school-house at their mines; and, generally speaking, there is a deep feeling of piety manifest among all classes throughout the province.

EDUCATION.—Where the responsibilities of the Christian religion are felt by the legislature, the duty of imparting sound instruction will not be neglected; neither is it so in South Australia. An ordinance of the local government (No. 2, of 1847), for the furtherance of education, grants to schoolmasters an allowance, in aid of their emoluments, of £20 per annum for the first twenty scholars, and £1 per annum for every additional scholar, beyond twenty, at school; the total not to exceed £40 to each school in one year. When this ordinance came into operation on the 31st March, 1849, thirty-three schoolmasters, already in the field, became immediate claimants for a sum of about £1,000 per annum. Among other scholastic institutions now in existence, there is now at Adelaide a well-conducted grammar-school, with 300 pupils, chiefly of the labouring classes, for whom a commodious school-house has been erected by the liberal subscriptions of a few benevolent persons. On 24th. May, 1849, the bishop of Adelaide laid the foundation stone of a church of England collegiate school at St. Peter's, Adelaide, for which the local government granted 111 acres of land, and towards which Mr. William Allen, of Buckland-park, Adelaide, a large proprietor in the Burra-Burra Mining Company, gave the munificent donation of £2,700. It is intended that this collegiate school shall eventually merge into a college, and accordingly, excellent statutes and regulations have been laid down for its government. The holy scriptures arc

to be taught in the original tongue, and the principles of the Christian religion carefully inculcated. To this most necessary knowledge is to be added instruction in any language, art, branch of science, or literature, which shall, from time to time, be deemed by the visitor and governors of the school important to constitute a sound and liberal education. The property and management of the collegiate school is vested in a council of fifteen governors, of whom not less than three, nor more than five, shall be clergymen of the church of England. Every lay governor, on accepting office, must sign a declaration that he is a member of the church of England, and that he considers the thirty-nine articles of the Book of Common Prayer to be agreeable to the revealed Word of God. The bishop of Adelaide, for the time being, shall be the visitor, and have power, at any time, to enter the school, examine and instruct the scholars, inspect the accounts and general management of the institution, correct abuses, and prevent the adoption of any bye-laws that might contravene the fundamental principles of the school, or frustrate the intentions of the original founders. The decision of the visitor, on any disagreements among the governors, shall be final. The head master must have graduated in arts or civil law in one of the universities of the United Kingdom, and his appointment rests with the governors.

Education is extending very generally throughout the province. In 1849, there were eighty-one day-schools, attended by 2,900 children, and forty-five Sunday-schools, attended by 2,500 children, in South Australia. There is also at Adelaide a school for the instruction of the children of the aborigines, where, in 1849, there were forty male and eighteen female scholars, who cost the local government £10 9s. 7½d. each, per annum, for education, food, and clothing. The following is a comparative return of Sunday and other schools in the province of South Australia, and of the average number of scholars attending them:—

Schools and Scholars.	1844.	1845.	1846.	1847.	1848.
Scholars, European male . . .	870	1,397	1,402	1,987	2,933
" " females . . .	856	1,272	1,210	1,910	2,469
" Native male . . .	85	74	76	100	40
" " female . . .	67	58	62	56	18
Total Scholars . . .	1,878	2,801	2,750	4,053	5,460
Number of Schools . . .	45	81	68	85	127

Mr. Mundy, late the secretary of South Australia, who most ably fulfilled the duties

of his office, and carefully collected various statistical returns, says of this document—"The information contained in this return has been obtained from private sources, not from authentic official records, and its accuracy cannot, therefore, be confidently relied upon."

THE PRESS of South Australia dates its origin previous even to the foundation of the colony. On the eve of the departure of the governor and emigrants from England, the first number of the *South Australian Gazette* was printed and published in London, on the 18th June, 1836. The second number of the *South Australian Gazette* was issued at Adelaide on the 3rd of June, 1837. Other newspapers soon started into existence, and there were subsequently issued a *Government Gazette*, *Southern Australian*, *Adelaide Observer*, *Adelaide Times*, a mining journal, &c. A well conducted *South Australian Magazine* was issued monthly, and the two *South Australian Almanacks*, which have been published annually for several years, are a credit to the colony, for the valuable mass of facts which they contain, and the moderate tone in which their able digests are written.

The extension and progressive increase of literature, and of newspapers, is in some degree exemplified by the following return showing the total number of letters and newspapers passing through the General Post Office, distinguishing ship from inland, during the years 1844, 1845, 1846, and 1847:—

—	1844.	1845.	1846.	1847
Number of Post-offices . . .	11	13	17	25
Letters:—				
Ship	26,911	31,277	30,233	47,312
Inland	9,784	11,052	11,136	31,638
Newspapers:—				
Ship	50,389	59,411	73,012	86,233
Inland	10,626	12,981	22,137	37,679
Total Letters	36,325	42,329	53,369	79,950
" Newspapers	61,015	72,392	95,149	123,912
Income	£752	£946	£1,106	£1,504
Expenditure	£751	£706	£915	£1,209

About one-third of the newspapers under the head of "inland" were received by sea, and are consequently entered twice.

It is stated by Sir H. E. F. Young, the present governor of South Australia, in an interesting despatch to Earl Grey on the state of the province, dated June 8th, 1849, that mails are despatched from the city to Hindmarsh village and to the port six times a-day, the postage being 2d., and the extreme distance eight miles and-a-quarter; the postage to all other places within the colony, thirty-one in number is 4d., and the extreme dis-

tance 233 miles. To the most settled districts the mail is despatched twice a-week; to Guichen Bay, Mount Gambier, Melbourne, and Sydney once a fortnight: and to Port Lincoln, by sea, as opportunities offer. The postage to Melbourne and Sydney is 8d.; the overland mail to Sydney is at present but little used by the public. The revenue of the Post-office of South Australia for the year ended 31st March, 1849, was £2,215, which nearly covered the expenditure.

CRIME.—It might be supposed from the erection of a gaol at Adelaide, at a cost of about £40,000, that there was a great amount of crime in the province, whereas the very opposite is the fact.

The annexed return extends over several years, and considering the newness of the colony, and its proximity to the large amount of prison population in Tasmania or Van Diemen's island, the number of criminals cannot but be considered small.

Comparative Return of the Number of Offenders convicted in the Province of South Australia since 1840, the years ending September 30th.—Since 1847, returns imperfect.

In the Supreme Court.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.
FELONIES:—											
Murder	—	1	—	3	—	2	—	1	—	—	—
Stabbing, cutting or shooting with intent to kill	—	—	—	—	1	—	—	1	—	—	—
” ” or do some bodily harm	—	—	2	1	1	—	—	—	—	—	—
Manslaughter	—	—	1	—	—	—	—	—	—	—	—
Highway robbery	4	1	—	—	1	—	5	—	—	—	—
Assault, with intent to rob	2	2	—	1	—	—	—	—	—	—	—
Burglary	2	1	—	1	—	—	2	3	—	—	—
Stealing in a dwelling-house	7	3	4	1	—	1	—	—	—	—	—
Burglariously breaking and entering dwelling-house, and stealing therefrom	—	—	—	2	—	—	1	—	—	—	—
Breaking and entering dwelling-house, and stealing therefrom	4	—	1	2	—	—	2	—	—	—	—
Stealing in dwelling-house, and putting the persons therein in bodily fear	4	—	—	—	—	—	—	—	—	—	—
Sheep-stealing	1	—	3	2	1	—	—	2	—	—	—
Horse-stealing	—	1	—	1	—	1	—	1	—	—	—
Cattle-stealing	—	—	4	3	1	—	—	—	—	—	—
Receiving stolen goods	1	1	1	—	2	—	—	—	—	—	—
Larceny	16	20	11	6	15	8	17	16	—	—	—
Larceny and former conviction	—	—	—	3	—	1	—	—	—	—	—
Stealing from the person	—	3	6	1	—	—	1	—	—	—	—
Stealing in a warehouse	1	1	1	—	—	—	—	—	—	—	—
Forgery	1	—	1	—	—	—	1	—	—	—	—
Uttering forged notes, orders, &c., with intent to defraud	—	—	—	1	—	1	2	—	—	—	—
Counterfeiting coin	—	—	—	—	7	—	—	—	—	—	—
Total felonies	43	34	35	28	29	14	31	24	—	—	—
MISDEMEANOURS:—											
Assault, intent to commit rape	—	1	—	—	—	1	1	—	—	—	—
Fraud	1	—	2	—	1	—	—	—	—	—	—
Assault	3	2	—	1	3	—	1	—	—	—	—
Concealing birth of child	—	—	—	—	—	1	—	—	—	—	—
Total misdemeanours	4	3	2	1	4	2	2	—	—	—	—
Total convictions	47	37	37	29	33	16	33	24	—	—	—

THE LAWS are, as in the other Australian colonies, entirely English, and administered by a supreme court, which sits for civil and criminal business four times a year. There is a judge, an advocate-general, and crown solicitor, a commissioner of insolvency, a sheriff, and an official assignee. The members of the legal profession, who in 1849 had taken out certificates as barristers and solicitors, were in number twenty-four. A resident magistrates' court sits daily at

Adelaide, and there are seventy of her Majesty's justices of the peace in different parts of the province.

The establishment of district or county courts, for the economical and summary recovery of debts under £50, according to the constitution of the "county courts," which are now working so satisfactorily in England, would be a great advantage, if extended to our colonies, and would supersede the necessity of "courts of request."

GOVERNMENT.—The affairs of the province are administered by a lieutenant-governor, usually styled a governor, who is joined in an executive council by the colonial secretary, the advocate-general, and the surveyor-general. The Legislative Council consists of the lieutenant-governor, colonial secretary, attorney-general, register-general, and four private gentlemen of the colony, holding no office under the government, but nominated by the crown under the recommendation of the secretary of state for the colonies. It is proposed to change this form of legislative authority to that of a Legislative Assembly, with one-third the number of members to be nominated by the crown. Of the proposed alteration I have given full details at pages 553 to 558.

The bill for the better administration of the affairs of the Australian colonies has now (19th of June, 1850) passed its second reading in the House of Lords without any material alteration in the provisions of the bill, excepting the withdrawal of the power from the crown of disposing of the waste lands in the colonies (see page 554), and the extension of the franchise by Earl Grey, conformable to the suggestions of leading practical men in both houses of the legislature. The bill may now, therefore, be considered as finally settled, and I deem myself at liberty to offer a remark which I did not feel justified in making in a work of this nature while the subject was pending; considering it my duty to avoid becoming a partizan on so important a question, or endeavouring to influence public opinion on what has not assumed in legislation or in action the character of a fact. With reference, then, to the measure for preserving, at least for the present, the existing form of Legislative Assembly of New South Wales (see p. 556), and for granting to the other Australian colonies a similar legislative body, I think that such procedure, namely, one House of Assembly, partly elected by the people, and partly nominated by the crown, the proportion nominated being one-third of the elected, decidedly preferable to having *two chambers* elected by popular suffrage.

In the committee of the House of Lords on the Australian Colonies' Government Bill (11th of June, 1850), Lord Monteagle moved that there shall be within each of the said colonies of New South Wales and Victoria a Legislative Council and a Representative Assembly; his lordship supported his motion by references to the mischievous

and dangerous effects resulting from a single chamber, and urged that "the only way to avert the evil (of a single and democratic chamber) was by a double chamber, to the upper of which, by the election of persons of greater age, for a longer time, and with a higher qualification, they would impart a stable and conservative character."

Lord Lyttleton, in supporting the proposition of Lord Monteagle, contended that "it was the bounden duty of the mother country to lay down the form of constitution best suited to her colonies;" according, however, to the report in the *Times* of the 12th of June, 1850, his lordship suggested that "the bill might be sent out to the colonies with words providing a double chamber, but leaving it to the colonies to fill up the scheme."

The bishop of Oxford suggested that there should be two chambers—one called the *Upper*, and the other the *Initiative*, but *both elected*; the upper to consist of a *small number* of persons, to be elected by a high franchise, and to be older men than the members of the Initiative: further, that they should sit for nine, instead of three years; and that only one-third of the members of the upper chamber should retire at a time. His lordship thought that a chamber thus constituted would be in "favour of things as they were," and thus act as a check on the Initiative chamber, who would "seek to improve by continual innovations;" and that the conflict and collision which was inevitable in every self-governing country, especially in those inhabited by our own blood and race, would be mitigated in its evil consequences.*

These propositions are at variance with the principles of monarchical government: they are perfectly in unison with the republican constitution of the United States, and might be supposed to emanate from the senate at Washington, rather than from the house of Lords in London. The congress of the United States of North America is a practical proof that *two elected* chambers are no security against the acknowledged evils of democracy, however different may be the qualifications of the electors or of the elected; and the sagacity of General Washington enabled him clearly to foresee, that a plutocracy, or domination of wealth, would in time become an all-pervading influence in the republic which he was unavoidably

* Debate in the House of Lords, 10th June, 1850. —*Times*.

compelled to adopt. A plutocracy is the great bane of colonial society; there being no object of attainment for human ambition, energy, or patriotism, the mere accumulation of riches becomes the sole spring for action, and men lose those ennobling influences which help to form the character, and guide the conduct of those who live under the eye of a sovereign, and desire the honorary or hereditary distinctions which the crown alone can bestow.

It is with deference, and, I may add, with diffidence, that I venture to offer an opinion adverse to the propositions put forth by several distinguished members of both houses for two elective chambers in the Australian colonies; but my colonial experience teaches, that to leave the representative of the crown in the distant parts of this empire without any gradation of rank between himself and the representatives elected by the people—without any breakwater between the surge of popular opinion and the undoubted prerogatives of sovereign power—must inevitably lead, and that at no distant date, to the formation of a republic, and a separation from monarchical England.

If, therefore, her Majesty's ministers did not deem that there were the materials in Australia for creating two chambers, in ac-

* Since the foregoing was written, Sydney papers have been received from New South Wales, to the date of 21st February, 1850, containing a memorial which is said to embody the wishes of the greater part of the colonists, who pray that all classes of the community may be fairly represented in the proposed new constitution, which, they hope, will resemble the British constitution as closely as the circumstances of the colony will allow; they pray to be "protected against rash and hasty legislation by the interposition of a second chamber, and that this step in the progress of constitutional government be no longer deferred." The constitution which the colonists seek is, the vesting of their government in three estates—(1.) a governor appointed by the crown; (2.) a Legislative Council, consisting of members nominated by the crown, together with *ex-officio* members of the executive, in the proportion of one *ex-officio* to four non-official members; (3.) a House of Assembly elected by the colonists. This is substantially the plan recommended in my *Colonial Policy*, published in 1837, for colonies when ripe for constitutional government; it is one for which New South Wales is now prepared, and which the colonists seek to obtain.

In the Legislative Council of South Australia, the Honourable John Morphett, an intelligent, respectable, and influential member of the local legislature (see Despatch from Sir H. E. F. Young to Earl Grey, dated Adelaide, 16th November, 1848), proposed—"That, in the opinion of this council, the form of the legislature should, as nearly as possible, resemble that of the mother-country, consisting of a governor and two chambers, one in the nature of

cordance with the principles of the British constitution, they had no alternative but the maintenance of the legislative system introduced by Lord Stanley, in 1842; and Earl Grey truly urged that the Legislative Council of New South Wales had "acted with more judgment, discretion, and regard to the public interests, than was usual with colonial governments;" that it stood "very high among colonial administrations, and was, on the whole, well adapted to the condition of the people." (June 10, 1850).

Time and circumstances will eventually necessitate the formation of legislatures in our southern colonies similar to those which have existed for so many years in British America and in the West India islands; for this change the bill now sanctioned by the house of Commons and the house of Lords provides; and when that necessity arises, her Majesty's ministers and the Imperial Parliament can more effectually deal with the question than probably could be satisfactorily done at the present moment.*

Lieutenant-Governors of South Australia according to the dates of their being proclaimed in the colony.

Captain Hindmarsh, R.N.	Dec. 28th, 1836.
Lieutenant-Colonel Gawler	Oct. 12th, 1838.
Captain Grey	May 10th, 1841.
Major Robe	Oct. 25th, 1845.
Sir H. E. F. Young	Aug. 2nd, 1848.

an upper chamber, to consist of hereditary members, nominated by her Majesty the Queen, and which members of the upper chamber, in order to secure identity of interest with the colony, should possess a certain landed qualification, free and unencumbered. And, further, in order to secure a permanence of that identity of interest, it is desirable that each inheriting member should possess, and prove the possession of, an equal landed qualification to his predecessor.—That, in the opinion of this council, the second chamber should consist of members elected by the people.—That all bills passing the two chambers, and receiving the assent of the governor, should at once become law.—That in the opinion of this council, an executive council should be given to the governor, consisting of two officials, having seats in one or other of the chambers, and two members of each of the chambers, all to be nominated by the governor. That such members of the executive should continue in office so long as the government could command majorities in both chambers upon questions introduced to the chambers by the governor, and so long as they retained seats in the respective chambers of which they were members. That such members of the executive should receive certain fixed emoluments. That in order to secure the irresponsibility of the governor, who would be a third branch of the legislature and the representative of sovereignty, the members of the executive council should be responsible, and should go out of office as before provided, and upon a vote of want of confidence, passed after due notice being given of its introduction, by the chamber of representatives.—[Further details given in Supplement.]

CHAPTER IV.

FINANCIAL STATE, REVENUE, LAND SALES, CUSTOMS' DUTIES, AND EXPENDITURE—
BANKING INSTITUTIONS—COMMERCE, IMPORTS, EXPORTS, AND SHIPPING—STAPLE
PRODUCTS—MINES AND MINERALS—AGRICULTURE—LIVE STOCK—PUBLIC COMPANIES
AND SOCIETIES—RATES OF WAGES—PRICES OF PROVISIONS—FIELD FOR
EMIGRATION. [*See also SUPPLEMENT for changes to the present period.*]

THE first chapter of this book on the history of South Australia, shews the improvident expenditure and consequent financial embarrassment, caused by the proceedings of Governor Gawler.

To save the province from ruin, the aid of the Imperial Parliament, as before stated (see page 645), became absolutely necessary, and in the year 1841, £102,649 were advanced to meet Governor Gawler's drafts on the colonization commissioners, and £52,350 to defray other expenses; in 1842, £27,290 was voted to meet Governor Gawler's drafts, and £32,646 to meet Governor Grey's; in the course of the three following years, £10,446 were advanced to meet Governor Grey's, making a total of £225,382, which, though at first voted as a loan, was subsequently confirmed as a grant. There has been, I believe, much discussion as to the amount of aid afforded by Parliament, but the above statement is given on the authority of a document recently sent home by the governor of South Australia. Notwithstanding, however, the large sums thus granted, the provincial government remains

burdened with a bond debt of £85,000, of which the interest is being paid by the colonists from the land revenue.

The colonists claim from the Imperial Treasury a sum of about £82,000 on the grounds of money to that amount having been abstracted from the land fund, and applied by the colonization commissioners during the difficulties of the colony to governmental purposes, notwithstanding the pledge given to all purchasers of land previous to the year 1841, that the produce of the land sales should be devoted solely to the furtherance of emigration. This demand the British government consider unreasonable; the common sense of the matter appears to me, that the sum in question having been borrowed from the emigration fund in aid of the local revenues, should be repaid from the same source for which it was borrowed—that is, whenever the fixed and incidental revenue exceeds the wants of the local government, a portion should be set aside for the repayment of the money borrowed. Annexed is a comparative return of the net ordinary revenue during the last six years:—

Details of Fixed Revenue.	1844.	1845.	1846.	1847.	1848.	1849.
Customs (including pilotage and tonnage dues)	£20,124	£25,590	£37,643	£48,742	£55,439	£73,900
Postage	752	946	1,108	1,504	1,954	2,000
Fees—Public Offices	1,689	2,207	2,561	3,533	} 5,366	4,500
Fines—Law Courts	274	347	175	237		
Licences	2,156	2,409	2,941	3,733	4,593	5,420
Auction duty	563	570	546	1,458	1,521	2,000
Assessment on live stock	1,486	2,191	1,341	4,860	3,175	4,000
Permits	44	52	47	—	—	—
Storage of gunpowder	24	65	155	174	129	200
Tolls	—	—	280	254	—	—
City rates	—	—	70	1,181	1,318	700
Total fixed revenue	27,116	34,381	46,871	65,679	73,495	92,700
Incidental	761	1,800	1,146	1,348	9,352	1,480
Total revenue	27,877	36,182	48,017	67,027	82,847	94,200
Deduct the revenue from each preceding year	—	27,877	36,182	48,017	67,027	82,847
Increase on each year	—	8,305	11,835	19,010	15,820	11,353

Note.—The circumstance of a large proportion of the assessments on live stock due for 1846 not having been collected until 1847, accounts for the apparent decrease in this branch of the revenue in the former year, and its increase in the latter. The revenue for 1849 is an estimate for the year ending 31st March, 1850, as laid before the Legislative Council at Adelaide, in the session of 1849–50. Revenue for subsequent years given in Supplement.

It will be observed that since 1844, there has been a steady annual augmentation of the revenue. The increase during the year 1847 over that of 1846 is thus noted by Lieutenant-governor Robe:—

Duties of Customs on Imports.—On spirits, an increase of 23 per cent.; on tobacco, 24; on wines, 98; on other goods, 35; on other customs' receipts, 67; on the general receipts of customs, 29.

The other sources of revenue show a corresponding increase in 1847:—Postages, 36 per cent.; fees of offices, 38; of which the registry fees, 44; fines, 36; licences, 27; auction duty, 166; and on the gross revenue, 39.

The auction duty increased very largely, which is attributed by the lieutenant-governor to the admission of goods to free warehousing, under the Ordinance No. 16, of 1846.

The annexed statement gives in detail the income of 1847 and 1848:—

Details of Income.	1847.	1848.
CUSTOMS:—		
Spirits imported	£18,378	£22,714
Wines	2,806	3,119
Tobacco	7,448	8,890
Other goods	19,118	20,094
Warehouse rents	990	222
Incidental receipts	—	57
	50,634	55,098
Less drawback repayments	1,892	596
Total	48,742	54,501
MISCELLANEOUS:—		
Postage of letters	1,504	1,954
Fines and fees	3,771	5,366
Licences (Publicans)	3,527	4,350
" (other)	206	243
Assessment on stock	4,860	3,175
Auction duty	1,458	1,521
Storage of gunpowder	174	129
Tolls	254	—
City rates	1,181	1,318
Pilotage and harbour dues	—	938
Total	16,735	17,994
INCIDENTAL:—		
Rents of government property	691	976
Sales of " " "	123	307
Surcharges recovered " " "	26	1
Repayments	299	1,160
Miscellaneous	207	6,969
Total	1,346	9,413
LAND FUND:—		
Proceeds of sales of waste lands		33,748
Licences, occupation		1,570
" timber		660
Rents of aboriginal reserves		28
Immigration department		76
Repayments		30
Total	no returns.	36,112
General total of receipts	—	119,023

Note.—Details since 1847 given in Supplement.]

The customs duties form the largest item of revenue. Until the 6th of July, 1849, there was a differential tariff in South Australia, but under the authority of the Imperial Legislature the colonial Legislative Council from the above date adopted a uniform tariff on the importation of the goods and produce of all countries alike. The duties levied on the principal articles are—manufactures of cotton, silk, wool, and linen, *five per cent. ad valorem*; also on arms, apparel, baskets, boats, brass manufactures, brooms and brushes, clocks and watches, copper manufactures, cutlery, earthenware, furniture, gloves, grindery, hair manufactures, iron manufactures unenumerated, implements and tools, lead manufactures, machinery, matting, musical instruments, netting, paper stained and hangings, perfumery, pewter ware, pictures, pipes not of common clay, plate and plated goods, saddlery and harness, stationery, tin ware, *five per cent. ad valorem*. On all other articles the duties are as follows:—

Alkali, 6d. per cwt.; annatto, 3s.; arrowroot, 3s.; bacon and hams, 2s. 6d.; bags and sacks—corn, 5s. per 100; ore, gunny and returned, 6s. 6d.; bales for wool, 2d. each; beef and pork, 1s. 6d. per cwt.; beer, porter, ale, cider, and perry, 3d. per gallon; liquid blacking, 4d. per gallon; paste blacking, 1d. per lb.; printed books, 6s. per cwt.; barrows and trucks, 1s. each; boots, 6s. per dozen pairs; half boots, 3s.; shoes, 2s.; children's, 1s.; bread and biscuit, 7d. per cwt.; glass and stone bottles, 1d. per dozen; fire and bath bricks, 5s. per 1,000; other bricks, 2s.; brimstone, 6d. per cwt.; butter, 3s.; chain cables, 1s. 6d.; tallow candles, 3s.; wax, composition, sperm, &c., 6s.; canvass, 2s. per bolt; carts and drays, 10s. each; wheeled waggons and timber carriages, 20s.; carriages, 5 per cent. ad valorem; empty casks, 2s. per tun; cement, 4d. per cwt.; chalk, 1s. 6d. per ton; cheese, 3s. per cwt.; chocolate and cocoa, 1d. per lb.; coals, 9d. per ton; coke, 2s.; coffee, 4s. per cwt.; confectionary, 2d. per lb.; copper, sheathing and nails, 5s. per cwt.; cordage and rope, viz. Europe, 2s. per cwt.; Manilla, 1s. 6d.; Coir and Jute, 9d.; unenumerated, 1s. 6d.; small cord and twine, 5s. per cwt.; cork, 2s.; corks, 1d. per gross; corn, meal, and flour, viz., wheat, 1s. 6d. per quarter; barley, 1s. 3d.; oats, 1s. 3d.; maize and millet, 1s.; peas, beans, and pulse, 1s. 6d.; malt, 3s.; flour and meal, 1s. per 100 lbs.; bran and pollard, 3d. do; cutlery, 5 per cent. ad valorem; drapery, ditto; drugs—corrosive sublimate, 2d. per lb.; spirits of tar, 1d. per gallon; vitriol, 1d.; unenumerated drugs, 5 per cent. ad valorem; other unenumerated and manufactures, ditto; bed feathers, 1d. per lb.; dry and pickled fish, 1s. per cwt.; flax, 1s.; dried fruits of all sorts, 2s.; in bottles, 6d. per dozen quarts; preserved in sugar, succades, and jams of all sorts, 1d. per lb.; fresh, 6d. per bushel; plate glass, in squares exceeding 600 inches, 4d. per lb.; not exceeding 600 inches, 3d.; crown and sheet, in squares exceeding 200 inches, 2s. per 100 feet; not exceeding 200 inches, 1s. 6d.; flint glass, cut, cast, mirrors, and manufactures, 5 per cent. ad valorem; glue, 1s. 6d. per cwt.; grease 1s.; sport

ing gunpowder, in canisters, 5s. per cwt.; blasting, 2s. 3d.; groceries, 5 per cent. ad valorem; haberdashery and millinery, ditto; hosiery, ditto; curled hair for upholsterers' use, 1d. per lb.; hats and caps, 5 per cent. ad valorem; hay, 2s. per ton; dressed hemp, 1s. 6d. per cwt.; undressed tow and oakum, 1s.; dressed hides, 3s.; raw, salt, and dried, 1s.; honey, 4s.; hops, 2d. per lb.; writing ink, 3d. per gallon; printing ink, 1d. per lb.; iron, viz., bar and rod, 10s. per ton; sheet and hoop, 14s.; pig, 5s.; sledges, anchors, anvils, plates, cart-arm moulds, and articles of wrought iron, heavy and in the rough, 1s. per cwt.; cart-arms and boxes, finished—chain, articles of wrought iron, finished, 1s. 6d.; camp ovens, pots, boilers, and castings, 10d.; refined isinglass, 6d. per lb.; common for manufacture, 2d.; implements and tools, 5 per cent. ad valorem; jewellery, ditto; old junk, 1s. per cwt.; lard, 2s. 6d.; lead, viz., pig, sheet, and shot, 1s. per cwt.; leather, sole, 3s. per cwt.; kip and harness, 6s.; calf, 1d. per lb.; patent bazils, 5s. per dozen; kangaroo, 1s.; hogskin, 1s. each; basils, 6d. per dozen; enamel, 3s. 6d. per hide; lime and lemon juice, and syrup of all sorts, 3d. per gallon; lucifers, 4d. per gross of boxes; macaroni and vermicelli, 1d. per lb.; mats and matting, 5 per cent. ad valorem; musical instruments, ditto; mustard, 1d. per lb.; needles, 3d. per 1,000; nuts, viz., almonds, walnuts, chesnuts, filberts, and small nuts, 2s. per cwt.; shelled almonds, 4s.; cocoa, 6d. per 100; oil, black, 1d. per gallon; sperm, head-matter, and other fish or animal oil, 3d.; linseed, rape, hemp, and cocoa-nut, 2d.; olive, castor, and other vegetable oils, 6d.; oilman's stores, 5 per cent. ad valorem; onions, 1s. per cwt.; paints, 1s.; painters' colours, and whiting, 6d.; brown paper, wrapping, and blotting, 3s. per cwt.; printing and cartridge, 5s.; writing, 1d. per lb.; other unenumerated manufactures, 5 per cent. ad valorem; parchment, 3s. per roll; percussion caps, 2d. per 1,000; pickles and fruit preserved in salt, 4d. per gallon; tobacco pipes, of common clay, 1d. per gross; pitch, 1s. per barrel; potatoes, 3s. per ton; provisions and preserved meats, 3s. per cwt.; pins, 1d. per lb.; rice, 9d. per cwt.; rosin, 6d. per barrel; sago, 1s. per cwt.; salt, 3s. per ton; saltpetre, 1s. 6d. per cwt.; skins for tanning, 4d. per doz.; soap, 1s. per cwt.; spices, viz., cassia, 3s. per cwt.; cinnamon, 2d. per lb.; cloves, 1d.; mace, 2d.; nutmegs, 2d.; ginger, 2s. per cwt.; pepper, 1s. 6d. other spices, 5 per cent. ad valorem; spirits or strong waters of all sorts, viz., for every gallon of such spirits or strong waters of any strength not exceeding the strength of proof by Syke's hydrometer, and so in proportion for any greater or less strength than the strength of proof, and for any greater or less quantity than a gallon; also, perfumed spirits not being sweetened or mixed with any article so that the degree of strength thereof cannot be exactly ascertained by such hydrometer, 10s. per gallon; spirits, cordials, or strong waters, sweetened or mixed with any article so that the degree of strength thereof cannot be exactly ascertained by Syke's hydrometer, 10s.; starch, 2s. per cwt.; steel, 2s.; stones—millstones, 2s. per foot diameter; grindstones, 1d.; roofing slates, 3s. 6d. per 1,000; slabs and flagstones, 1s. per 100 feet superficial; tomb and wrought stones, 1d. per foot ditto; marble, wrought, 6d. ditto; bluestone, 5s. per cwt.; refined and candy sugar, 4s. per cwt.; muscovado, 2s.; molasses, 2s.; tapioca, 2s.; tallow, 2s.; tar, 1s. per barrel; tea, 2d. per lb.; tin plates, 2s. per box; tobacco, manufactured, 2s. per lb.; unmanufactured, 1s.; cigars and cheroots, 5s.; snuff, 2s.; boiled down in

bond for sheepwash, 1d.; toys, 5 per cent. ad valorem; turnery and woodenware, ditto; spirit of turpentine, 2d. per gallon; vinegar, 1d.; whalebone, 14s. per cwt.; wine, 1s. per gallon; wood, viz., posts and rails, hand spikes, and poles, 1s. 6d. per 100; paling, 6d.; shingles and laths, 6d. per 1,000; trenails and spokes, 2d. per 100; oars, 2s. per 100 feet; square timber, and balks, spars, deals, battens, quartering, planks, boards, and sawn, hewn, or split timber of all kinds, not otherwise particularly enumerated or described, 2s. 6d. per 40 cubic feet; manufactures of wood, 5 per cent. ad valorem; zinc, and manufactures of ditto, ditto.

Unenumerated articles, raw and manufactured, 5 per cent. ad valorem.

Animals, living; baggage of passengers; bottles imported full; bullion and coin; plants and trees; seeds and roots, garden; specimens illustrative of natural history, and wool unmanufactured are imported free.

CUSTOMS' STORAGE.—Ample accommodation is provided by the government at this port for the storage of goods in bond, for which the following are the weekly rates of storage:—For every pipe or puncheon, 1s.; hogshhead or half-pipe, 6d.; barrel or quarter-cask, 3d.; tierce, 4d.; six-dozen bottle cases, 6d.; three-dozen ditto, 3d. Any less or greater quantity to be charged in proportion to the above scale.

The powder magazine is situated on La Fevre's Peninsula, opposite Port Adelaide, where powder is stored at the following rates:—For each barrel containing 50 lbs., for not more than six weeks, 1s.; above six weeks, per week, 2d.; containing less than 50 lbs., for not more than six weeks, 6d.; above six weeks, per week, 1½d.

Rates of Pilotage.—For every vessel taking a pilot, £2; and in addition for every foot of draft of water above nine feet, 10s.; vessels employing the steam tug have one-fourth of their pilotage remitted. *Harbour Services*—Mooring, unmooring, and removing vessels above 70 and under 100 tons, 10s.; if 100 tons register, 15s.; and for every 20 tons above 100 tons, 1s. In addition to the above, 1s. per hour for each man in the harbour department employed in the above service. The charges for the use of the steam tug for towing in or out of harbour any vessel of 200 tons register or less, £5; and for every ton over 200 tons, 6s.

Dues on entry and clearance, wharfage and pilotage, were abolished in 1845. The storage charges at Port Adelaide are for every pipe or puncheon, weekly, 1s.; hogshhead or half-pipe, 6d.; barrel or quarter cask, 3d.; tierce, 4d.; six dozen bottle case, 6d.; three dozen ditto, 6d.

All her Majesty's vessels of war, hired transports, merchant ships freighted wholly or in part by government, vessels of the royal yacht squadron, and ships of war belonging to friendly nations, are exempt from all pilotage, dues, &c.

"City rates," or assessments on houses, were raised in 1847 from six to twelve-pence

in the pound; the whole of such rates are expended upon the streets of Adelaide. Licences to publicans yield no inconsiderable revenue, as will be seen by the subjoined:—

Number of Publicans' Licences granted in South Australia from 1844 to 1847, inclusive.

Year.	Publicans' General Licences.		Wine and Beer Licences.		Storekeepers' Licences.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
1844	63	£1,575	7	£84	5	£25	£1,684
1845	73	1,825	12	144	5	25	1,994
1846	106	2,650	13	156	6	30	2,836
1847	135	3,375	6	72	9	45	3,492

Comparative Number of Public Houses in the Province of S. Australia from 1844 to 1847 inclusive.

Locality.	1844.	1845.	1846.	1847.
Adelaide	34	41	54	61
Port Adelaide and Albert Town	3	4	4	5
Country, including P. Lincoln	33	40	60	66
Total	70	85	118	132

The annexed table shews the quantity of land sold, the price per acre, and the income :

Year.	Quantity of land sold, in acres.	Average price per acre.	Total amount of Purchase-money.		Proportion received in each year.
			Paid in Eng-land.	Paid in S. Aus-tralia.	
1835	58,995	£0 12 0	£35,397	—	£35,397
1836	1,690 240	0 12 0 1 0 0	1,248	—	1,248
1837	591 3,120	6 1 0 1 0 0	3,120	3,594	6,714
1838	48,040	1 0 0	37,960	10,080	48,040
1839	170,841	1 0 0	48,336	122,505	170,841
1840	15,565 ³ ₄	1 0 0	7,040	8,525	15,565
1841	1 7,650 ¹ ₂	0 12 0 1 0 0	320	7,321	7,651
1842	17,081 ¹ ₂	1 0 0	80	17,001	17,081
1843	598	1 0 0	—	613	613
1844	1,496* 1,932†	2 6 4 1 2 8	100	5,566	5,666
1845	5,675* 43,983†	1 11 3 1 0 0	—	52,902	52,902
1846	11,193* 48,209†	4 9 8 1 0 0	21,720	76,874	98,594
1847	16,911* 18,092†	1 2 7 1 0 0	908	35,428	36,336
1848	29,200	1 1 9	—	—	36,112
1849	—	—	—	—	—
1850	—	—	—	—	—

Note.—325,464³/₄ acres were sold at fixed prices, and 2,367 acres disposed of by public auction up to the year 1844; 3,463 acres have been reserved for the aborigines. The acres marked thus (*) were sold by public auction, and those marked thus (†) at fixed prices.

It will be observed, that in 1843 the sales of land had diminished to 598 acres; and even that small quantity would not have been sold at 20s. an acre, but that some of it contained minerals, which in that year were discovered in South Australia. The subsequent sales have been chiefly owing to this fortunate addition to the natural resources of the colony. It is understood

that the colonists of South Australia are generally favourable to the maintenance of the system of public sales at a minimum price of 20s. per acre. This, considering the mineral value of the lands, and that most of the purchases have been made on this principle, is not unreasonable. But it seems to be forgotten that the minimum price at public auction of a commodity in demand is of comparatively little consequence, for, in this case it may be said with Hudibras,

“The value of a thing
Is just as much as it will bring.”

If limited quantities of surveyed lands were annually offered to public competition, at a price, say, of 5s. per acre, due notice being given of such sales in England and in Australia, and accurate surveys on an extended scale deposited in a crown-land colonial office in London, as well as in the colony; whatever the land was actually or prospectively worth would be bid for it, irrespective of a minimum upset price.

During the debate on the Australian colonies bill in the House of Lords, Lord Lyt-leton proposed that the power of repealing all or any part of the 5 & 6 and 9 & 10 of Vic., regulating the sale of waste lands in the Australian colonies, should be given to the governors in council of New South Wales, Victoria, Van Diemen's Land, and South Australia; and that they might make further or other provisions for the management of the said waste lands, and the appropriation of the sums derived from such sales. His lordship ably and rightly contended that it was altogether inexpedient longer to maintain the existing price of £1 per acre in these colonies, especially in New South Wales and Victoria; and he referred to the report from the Legislative Council of New South Wales on the subject (see p. 428). That the local legislatures would reduce the price of land he had no doubt; but he did not imagine they would be disposed to alter any of the other principles of the existing land sales; they would maintain the division of the land fund in two parts, applying the one to local improvements, the other to emigration. If the local governments did not thus act, the Imperial Legislature might refuse their assent to any deviation from that principle. As to those who had purchased land on the understanding that the *minimum* price of £1 per acre was not to be reduced, he had no doubt but the local legislatures would act rightly in regard to them; but

these vested individual interests were, in New South Wales and Victoria, exceedingly few in number, as the land sales at this price were very limited.

Earl Grey, however, in the same debate, (12th June, 1850), truly observed, that the "crown lands in the colonies were domains held by the sovereign as trustee, for the benefit of all the subjects of the realm," and that "the interests of the people of England were to be considered on this question." The subject is one of great importance to all classes; and other occasions will occur for its further examination.*

At the beginning of the year 1849, the land alienated by the crown in South Australia amounted to 499,283 acres; there were then surveyed and unsold county lands, 82,287 acres, and 16,902 acres surveyed and unsold mineral lands open for purchase, at the upset price of 20s. per acre, without competition, as they had been previously offered for sale, and remained unsold. The lands surveyed, but not yet sold, comprise

320,168 acres, and, under the existing regulations, cannot be sold for less than twenty shillings per acre. The unsurveyed land is computed at two million acres. How much of it is available for tillage or for pasturage it is impossible to say; but even at five shillings per acre, there is a considerable revenue still to be obtained by the crown from this source. The average cost of the surveys in South Australia, during the year 1848, was about fourteenpence-halfpenny per acre, including everything but office-rent.

EXPENDITURE.—In 1840, when the colony was just formed, the expenditure was £169,966; but this ruinous extravagance was checked, as we have seen, by dishonouring the drafts of the governor, and by the recal of Colonel Gawler. As soon as practicable, his successor, Captain Grey, reduced the expenditure to reasonable limits; and, in 1844, it was within £30,000: the subsequent annual disbursements have, in each year, been less than the revenue. The progressive increase is thus shown:—

Expenditure.	1844.	1845.	1846.	1847.	1848.	1849.
Civil establishment	£17,293	£17,507	£18,303	£22,262	£25,449	£39,997
Contingent expenditure	2,017	3,133	4,001	6,722	10,407	2,640
Judicial establishment	3,636	3,421	3,637	4,126	4,331	5,707
Contingent expenditure	258	245	468	1,087	1,322	250
Ecclesiastical establishment	214	350	350	350	350	350
Contingent expenditure	—	—	777	1,892	—	—
Public buildings and works	509	2,728	3,896	15,646	28,888	20,034
Miscellaneous	5,523	4,711	5,772	6,891	9,382	11,333
Total	29,450	32,099	37,207	58,976	80,129	80,311
Deduct expenditure of previous years	—	29,450	32,099	37,207	58,976	—
Increase on each year	—	2,649	5,108	21,769	21,153	—

Note.—The great increase of expenditure during the year 1847 was occasioned by the number of public works—bridges, buildings, &c., completed, or which were in course of completion, during that year. In addition to the above annual expenditure, t.e following repayments have been made from the Colonial Revenue on account of debts incurred by the local government prior to the year 1844, viz., to her Majesty's Treasury, the sum of £1,274 15s. 4d., paid in 1844 in liquidation of claims incurred in the year 1841; to the Land Fund, £984 11s. 2d. in the year 1844; £1,800 in the year 1845; £9,000 in the year 1846; and £7,820 2s. 9d. in the year 1847. 1849 is an estimate only.

An abstract of the expenditure estimate for the year ending 31st March, 1850, will prove the resources which a body of Englishmen can develop within a very brief period, when located in a country favourable for their habitation, unfettered in their energies and industry. All the following salaries are paid from the taxes, voted and collected annually by themselves:—

Governor, £1,500; private secretary and establishment, £424; legislative and executive councils, £424; colonial secretary (£700) department, £1,844; treasurer (£500) department, £1,060; registry, £430; audit,

£830; customs, £2,749; crown lands, £1,326; survey, £3,309; colonial engineers, £1,845; royal sappers and miners, £823; post-office, £3,342; harbour, £4,327; colonial store-keeper, £200; superintendent of cemetery, £50; out-stations, £1,445; police, £11,756; aborigines, £1,991; medical, £1,082; lunatic asylum, £579; supreme court (judge, £1,000) £1,992; insolvent court, £300; resident magistrates' court, £780; bench of magistrates, £150; sheriff's department, £1,565; advocate-general, £700; coroner, £220; colonial chaplain, £350. These sums are irrespective of £2,890, supplementary votes, about £30,000 for public works, and

* Present state of the "land question" in Suppt.

nearly £12,000 for miscellaneous expenditure.

A moiety of the money arising from the sales of crown lands is applied to immigration; the other moiety, styled the crown reserved moiety, is applicable to the survey, crown lands, and aborigines departments. Out of this moiety £15,000 was paid in 1848 and 1849, on account of the year 1848, towards the extinction of the colonial bonded debt, of which the interest, at five per cent., is paid yearly, out of the general colonial revenue.

The estimated expenditure of the land fund of South Australia, from April to December, 1849, was as follows:—

Amount of relief to the General Revenue } to be charged to the Land-Fund	£7,971
For immigration	17,714
For public works	3,355
Towards extinction of the bonded debt of } £84,000	17,950
For roads and bridges	7,659
For sundry small items	783
	£55,433
Which will be covered by an estimated } revenue from lands sold	27,000
From licences and rents	1,875
Balance in hand	26,558
	£55,433

Greatly to the credit of the colonists, they have contributed liberally to the promotion of public works and improvements; under this head, the sums voted were, in 1846, £3,616; in 1847, £14,847; and in 1848, £28,789; and the estimated sum for the year ending 31st March, 1850, is upwards of £30,000. The cost of the Supreme Court-house is £6,000; the government-house, hospital, jail, police office, Resident Magistrates' court, and slaughter-house, would be creditable to any city in England. The expenditure from the British treasury for troops, or what is termed "military protection," was, in 1843, *nil.*; 1844, £1,000; in 1845, £3,700; in 1846, £3,750; in 1847, £4,000. The total cost for pay of troops and commissariat expenses for five years ending 31st March, 1847, was £15,890. There is a militia consisting of two troops of cavalry and one company of infantry, but it has not been called out since 1840, and there is no expense attending the force.

BANKING ESTABLISHMENTS.—South Australia has its own public bank, which is coeval with the foundation of the colony;

there is also a branch of the *Austral-Asian*, and, recently, one of the *Union Bank of Australia*, has been placed at Adelaide. The *South Australian Bank* appears to be a well-conducted chartered company; it has a subscribed capital of £200,000, in shares of £25 each; upwards of £180,000 have been paid up. By the charter, there is a power of augmenting the capital to £500,000. The corporation is managed by a court of directors in London, and there is a local board of three directors at Adelaide, aided by a manager. The net profits of the bank at Adelaide and in London, for the year 1849–50, was £15,153; the dividend paid to the proprietors for the year, was six per cent. free of income-tax.

The bank averages for South Australia are thus stated since 1843:—

Liabilities.

Year.	Notes in circulation.	Bills in circulation.	Deposits.	Balance due to other banks	Total.
1843	£9,939	£3,314	£51,897	£793	£65,944
1844	11,027	1,890	55,348	787	69,054
1845	14,912	3,714	66,513	340	85,480
1846	23,224	5,008	91,848	1,451	121,532
1847	32,008	4,793	102,636	1,739	141,178
1848	40,937	5,826	118,563	241	165,568
1849	—	—	—	—	—
1850	—	—	—	—	—

Assets.

Year.	Coin.	Landed property.	Balances due from other banks.	Notes and bills discounted and all debts due to the banks	Total.
1843	£27,881	£8,139	£2,944	£186,067	£225,032
1844	32,492	7,867	3,055	181,121	224,537
1845	30,314	7,590	3,495	174,971	216,376
1846	69,238	7,226	2,707	196,480	275,652
1847	101,868	7,382	9,280	309,097	409,646
1848	88,620	10,440	7,194	367,765	474,021
1849	—	—	—	—	—
1850	—	—	—	—	—

The Coins in circulation are the gold, silver, and copper coins of Great Britain, which bear the same current value as in the United Kingdom.

On 31st December, 1848, the coin in the colony was estimated at £125,247; viz. in the Bank of South Australia, £57,573; Bank of Austral-Asia, 25,674; in treasury chest, £32,000; in circulation, £10,000. The weekly average amount of bank-notes in circulation is £48,371.

The course of exchange on London from

1st January to 23rd October, 1848, was two per cent. premium; from 23rd October to 31st December, 1848, four per cent. *On the colonies*, 1st January to 23rd June, two per cent. premium; from 23rd June to 31st December, one per cent., by the Bank of Austral-Asia; and by the Bank of South Australia, for same periods, three to two per cent. premium.*

Weights and Measures as in England.

There is a well-managed *Savings' Bank* at Adelaide, which possesses the confidence of the public.

COMMERCE.—The rapid establishment of settled and profitable commercial intercourse

between South Australia and England, affords a good proof of the value which the merchants, manufacturers, and shipping interest derive from the foundation of colonies where Englishmen can produce those articles which are in demand in the United Kingdom, and receive in exchange British manufactures. South Australia, that but a few years ago was a wilderness, has now a maritime trade in value little short of a million sterling.†

The following shows the imports and exports since 1839, shortly after the formation of the settlement, the years ending January :—

Year.	Imports from				Imports consumed in colony.	Exports to				Imports re-exported.
	Great Britain.	British Colonies.	Foreign Countries.	Total.		Great Britain.	British Colonies.	Foreign Countries.	Total.	
1839	£123,308	£200,325	£23,016	£346,649	—	£9,524	£6,515	—	£16,039	—
1840	151,026	124,874	27,420	303,320	—	15,699	16,380	—	32,079	—
1841	161,480	123,192	3,676	288,348	—	53,798	50,263	£589	104,650	—
1842	93,382	69,403	6,627	169,412	—	39,628	35,375	245	75,248	—
1843	58,479	47,024	3,595	109,098	—	53,987	26,138	730	80,855	—
1844	63,610	54,366	854	118,830	£105,993	64,787	28,451	2,020	95,258	£12,921
1845	103,797	75,848	5,174	184,819	168,160	97,600	41,075	9,783	148,459	16,658
1846	174,689	141,661	13,748	330,099	303,321	218,095	92,340	2,402	312,838	25,778
1847)	235,374	166,475	8,975	410,285	335,692	166,080	170,360	13,907	350,348	75,133
1848)										
1849	177,428	196,236	10,662	384,326	346,130	334,977	167,215	1,875	504,068	38,208

Note.—The foregoing returns cannot be carried back beyond the year 1839, as the colonial records from which they have been compiled do not embrace any earlier year.

The shipping outwards, from the years ending January, 1848 and 1849, according to the Blue Books, was :—

Year.	Great Britain.		British Colonies.		Foreign States.		Total.		
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Men.
1848	30	10,940	152	28,275	15	5,101	197	44,316	2,575
1849	16	5,572	125	22,156	10	3,152	151	30,880	1,795

According to a return in the *South Australian Almanack* for 1849, the number of vessels entering *inwards* for five years, was, from—

Year.	Great Britain.	British Colonies.	Foreign States.	Total.
1844	6	60	2	70
1845	12	97	5	114
1846	20	111	11	142
1847	28	115	7	150
1848	35	170	10	215

Note.—The vessels registered according to law in the colony were, in 1848, 17—tonnage 1,648.

* It may not be irrelevant to mention for the benefit of those seeking information on colonial subjects—that it may be obtained with trustworthy accuracy at Saunders' Colonial Library, Charing Cross, where all the colonial newspapers are filed, the proprietor of that establishment understands his business.

The value of imports for the year ending 5th April, 1849, was £471,526; of the exports, £485,922. Tonnage, in, for the year ending 5th April, 1849, 59,011 tons; tonnage, out, 53,327 tons. Value of staple produce exported during the year ending 5th April, 1849, £446,643 10s.

STAPLE PRODUCTS.—I have shewn, in a previous page, the quantity of wool exported from South Australia (p. 618.) The quantity shipped from South Australia, for the following years was, in 1845, 1,078,559 lbs.; 1846, 1,473,186; 1847, 1,804,918; 1848,

† In order to render this work *permanently* valuable, and a record of the past, as well as an exposition of the present state of our colonies, full and accurate details will, so far as known, be given to the latest date in the Supplements and Appendices.

2,329,134; 1849, (estimated) 2,500,000. The value of the wool exported is about £120,000, and of tallow, about £5,000. Tallow, which first appeared on the list of staple produce during the year ending 5th July, 1849, amounted to 2,168 cwt. Wheat, flour, barley, maize, and oats, are now becoming staple exports of the province; in 1843, the quantity of wheat and wheaten flour exported, was equivalent to 38,482 bushels; in 1847, to 169,490; and in 1848, wheat and flour were shipped to the value of £40,000. The wheat is of excellent quality; some may be seen at the *South Australian Company's* offices in London, with a larger ear and a longer stalk than any to be found in the United Kingdom. Eight hundred quarters of South Australian wheat were recently received in Mark-lane, weighing 63 to 65 lbs. per bushel, and sold for 53s. per quarter, when the price of English grown corn was much lower.

Leather, whalebone, oil, beef, live animals, gum, bones, dried fruits, and other articles, are now recorded in the export list, and to this list, doubtless, various items will probably be added. The value of the exports from South Australia for the following years was, 1845, £103,981; 1846, £190,669; 1847, £275,171; 1848, £354,907.

According to an official return printed by order of the house of commons, 5th July, 1850 (No. 511), the total imports of South Australia for ten years ending 1848, were valued at £2,643,847; the exports for the same period at £1,719,856: the shipping inwards was, in tons, 236,624. The quantities and values of the two staple products of the colony, wool and minerals, exported, are stated to have been thus:—

Year.	Wool Exported.		Minerals Exported.	
	Quantity in lbs.	Value.	Quantity in tons.	Value.
1839	—	8,740	—	—
1840	—	8,740	—	—
1841	641,825	36,226	—	£390
1842	661,191	29,749	—	—
1843	1,159,574	45,568	20	128
1844	819,897	42,770	442	6,437
1845	1,331,888	72,236	1,158	19,019
1846	2,042,195	106,510	6,609	142,231
1847	1,114,862	56,131	9,301	174,017
1848	2,170,793	98,582	17,006	320,624
Total	9,942,225	505,252	34,536	662,456

Note.—For the years 1839-40 the wool exported is not stated; nor does there appear to have been any exports of minerals during the same period. In 1842 a small quantity of lead and copper was exported, but no mention is made of its being the produce of the colony.

The largest article of export consists of metallic ores, of which the discovery is recorded in the chapter on the history of the province, p. 648. The discovery of a silver-lead mine, termed the Wheal-Gawler, was owing to the wheels of a heavily-laden dray passing over a "bunch" of the mineral cropping, through the surface;—the brilliancy of the fragments revealed the treasure possessed by the colonists. The first export was some lead ore, in 1841, to the value of £390. The exports have subsequently increased in the following ratio:—

Year.	Ores in tons.			Value.			
	Cop-per.	Lead.	Eme-ry.	Copper.	Lead.	Eme-ry.	Total.
1843	1	18	—	£23	£104	—	£127
1844	277	203	—	4,009	2,427	—	6,436
1845	664	273	—	10,351	3,133	—	13,484
1846	2,691	189	—	58,395	1,919	—	60,314
1847	6,921	60	—	142,060	580	—	142,640
1848	10,632	271	68	199,134	3,954	£700	203,788
1849	16,323	682	—	310,172	10,452	—	320,624

There are about thirty-five mines in South Australia, of which about one-half are in active working; they are all copper, except two, copper and lead; five, lead and silver-lead; and one, copper and gold. These mines are all within 100 miles of Adelaide, except two mines, which are close to available harbours. A special survey of 20,000 acres has been purchased in the neighbourhood of Mount Remarkable, with a view to mining operations; and mining explorations have commenced near Port Lincoln. To what extent the mineral resources of the colony may yet be developed, it is impossible to predict.

Thus, in the short space of seven years, and in a colony whose duration only doubles that period, the exportable produce in metals has been augmented from £127 to £320,624; from one ton of copper ore to sixteen thousand tons. Of the copper ore raised in the year 1848, there was exported to Great Britain, in value, £206,605; and of the lead ore, in the same year, to Great Britain, £3,215. India and China afford large and profitable markets for any quantity of copper or lead above what England may require. Iron ore and mineral iron exist in ponderous masses in various parts of the province: gold, in a black metallic-looking sand, has been found in the bed of the Torrens river; it is also said to exist, in considerable abundance, in other places, and one or two gold mining companies have been formed at Adelaide for the collection

of the precious metal. To afford some idea of the progress of mining operations in the

colony, I subjoin a list of the mines in the colony at the close of the year 1848:—

Name.	Date of Formation.	Where established.	Capital.
Montacute Mining Company	Mar. 1845	Adelaide	£5,000, in 1,000 shares.
South Australian Mining Association	16 April 1845	"	12,320, increasable to £20,000.
Princess Royal Mining Company . .	16 Oct. 1845	"	20,000, in 400 shares of £20 each.
Paringa " "	13 Nov. 1845	"	20,000.
Wakefield " "	1845	"	5,000.
Glen Osmond Union " "	20 Nov. 1845	"	30,000, in £10 sh. inc. to £50,000.
Australian " "	1845	London & Tungkillo	400,000, paid up £80,000.
Adelaide " "	16 May, 1846	Adelaide	10,000, in 2,000 shares.
North Kapunda " "	13 June 1846	"	22,000, all paid up.
Mount Remarkable " "	3 Nov. 1846	"	25,000.
Victoria Gold Mine	1846	"	20,000, in 10,000 shares.
Prince Albert " "	1848	"	5,000, in 1,000 shares.
Port Lincoln " "	3 May, 1848	Port Lincoln	3,000, in 600 shares.
Barossa " "	1848	London	30,000.
Royal " "	1848	Adelaide	50,000, in 5,000 shares
Enterprize " "	1848	"	3,000, in 1,000 shares
Provincial Mining Association . . .	Aug. 1848	"	6,000, in 1,000 shares.
Kapunda Mine	—	"	—
Wheal-Granger Mine	—	"	—
Wheal-Gawler " "	—	"	—
Belvidere " "	—	"	—
Kanmantoo " "	—	"	—
Greenock Creek " "	—	"	—
Adelaide Ore Smelting Company . .	2 Dec. 1847	Near Albert Town	10,000, in 400 shares.
Assoinga " "	24 May, 1848	Tohill's Gap	—
Patent Copper " "	—	Kooringa, &c. . . .	—

Note.—There are no particulars published where the dash is inserted.

All these companies, except the *Australian Mining Company* and the *Barossa Range Association*, have been established in the colony. The *Australian Company* has already received about 1,500 tons of copper, which average about thirty-five per cent. of pure copper. They have pushed forward the workings at their mines at Tungkillo with much energy, driven an adit to the extent of 180 fathoms, and laid down a tram-road of 150 fathoms. Steam power, pit work, and other machinery for three shafts, sufficient to take the mine down 100 fathoms below the adit, together with a general supply of mining implements and stores, have been recently sent out to the colony by the board of directors in London; and under the management of able officers, and with practical Cornish miners, the efforts of this spirited company will, it is to be hoped, reap an ample reward.

After the discovery of the Kapunda copper mine in 1843-4, by Captain Bagot's son and Mr. Dutton, the attention of the colonists was strongly directed to the subject, and at the end of 1844, and beginning of 1845, reports were rife in Adelaide, that a "monster mine" of untold wealth had been found by a shepherd: the precise locality was for some time kept secret; and

after great exertions to raise £20,000 in Adelaide, owing to the depressed state of the province, two associations collected the required sum, and purchased 20,000 acres, by special survey, in the vicinity of the Razorback mountain and Burra creek, lat. 33° 40' S., long. 13° 98' E., eighty-five miles north by east from Adelaide. The two associations having lineally divided the property, apportioned it by lot, the northern half fell to those who formed the *Adelaide Mining Company*, and has been called *Wheal-Grey*; the southern half became the property of an association called the *Princess Royal Mining Company*.

The progress of that portion of the Burra-Burra mine termed the *South Australian Mining Company*, for three years ending 30th September, is thus shown:—

Particulars.	1846.	1847.	1848.	Total.
	Tons.	Tons.	Tons.	Tons.
Ore raised	6,359	10,794	16,231	33,386
Carted to P. Adelaide	2,726	6,963	11,731	21,421
Sold there	10	1,067	3,203	4,481
Shipped to Gt. Britain	2,453	5,370	7,588	15,413

The dividends paid from the produce of this mine are very extraordinary. *First* dividend, 24th June, 1847, fifty per cent.; amount, £6,160: *second* dividend, 8th July,

1847, *fifty* per cent.; amount, £5,160: *third* dividend, 18th August, 1847, *one hundred* per cent.; amount, £12,320: *fourth* dividend, 1st December, 1847, *two hundred* per cent.; amount, £24,640: *fifth* dividend, 1st March, 1848, *two hundred* per cent.; amount, £24,640; *sixth* dividend, 1st June, 1848, *two hundred* per cent.; amount, £24,640: *seventh* dividend, 1st September, 1848, *two hundred* per cent.; amount, £24,640. Total sum, dividends, in fifteen months, amounting to *one thousand* per cent. = £123,200, of which £119,850 have been actually paid. This prosperity continues.

In the half-yearly report (19th April, 1848) of the Burra-Burra mine, it was stated that there were 567 operatives engaged in raising and dressing the ore, and in other pursuits connected with their establishment: that in future, so long as the then satisfactory prospects continued, the directors proposed "paying dividends of two hundred per cent. on the capital stock, on the first day of every third month." The funds necessary to purchase the land in which the mine is situated were procured by issuing 2,464 shares, of five pounds each, the greater number of which are held by the colonists, and are now saleable at about one hundred and twenty pounds!

The following return, compiled from the Swansea ticketing papers, exhibits the produce shipped from the South Australian mines, during the years 1846-7:—

Mines.	1846.		1847.	
	Tons.	Value.	Tons.	Value.
Burra-Burra . . .	1,176	£20,684	4,351	£94,263
Kapunda . . .	831	16,726	1,480	27,769
Montacute . . .	265	4,370	55	1,029
Kanmantoo . . .	78	1,259	228	3,236
Paringa . . .	19	394	100	1,608
Princess Royal . .	—	—	60	1,221
Total . . .	2,369	43,433	6,274	129,126

The average price, per ton, obtained for the ores thus sold, was, in 1846, £18 7s. 2d.; in 1847, £20 1s.; but the heavy depreciation which subsequently took place in the copper market, very materially diminished the amounts realised for South Australian ore. The average cost of raising the ore, including every item previous to shipment, was about £6 sterling per ton; freight and charges to Swansea, £5 15s. per ton: leaving, at £20 per ton, more than £8 per ton

clear profit. The formation of a tram-road from the Burra-Burra mine to the city of Adelaide, and of a railroad from the city to the port, as now proposed, will greatly reduce the cost of transit from the mine to the shipping, which is considerable. For instance, from September, 1845, to March, 1847, the cartage alone was £21,466.

The distance of South Australia from England has induced the colonists to direct their attention to smelting the ore at the mines, a company has been recently formed at Adelaide, and the Yatala smelting works are now in progress, at a convenient position between the city and port of Adelaide. Another set of smelting works have been constructed near the Burra-Burra mines, contiguous to an extensive forest, by Messrs. Walters and Williams, in connection with Messrs. Schneider and Co., of London, at a cost of £70,000. The Messrs. Thomas, a well-known and respected family from Cornwall, possessed of much experience in mining, have erected a copper smelting furnace near the South Australian Company's mine at Kanmantoo; other smelting establishments are in progress, including small furnaces for smelting lead; and, in a few years, no more of the poorer ores will be shipped from South Australia, by which a considerable increase of profit must accrue to the colony and to the mining proprietors.

The following is a comparative return of manufactories and works in the province of South Australia, from the years 1844 to 1848: [For continuation see Supplement.]

Description of Work.	1844.	1845.	1846.	1847.	1848.
Barilla manufactory . . .	1	1	1	1	1
Boat-builder . . .	—	—	1	1	1
Boiling-down establishments . . .	—	—	—	2	2
Breweries . . .	9	18	13	15	14
Candle-maker . . .	—	—	—	1	1
Cloth and woollen manufactory . . .	—	—	1	1	1
Coach manufactories . . .	2	3	4	4	4
Flour mills—Steam . . .	3	11	15	15	—
Wind . . .	7	8	8	8	—
Water . . .	2	3	1	2	—
Cattle . . .	4	2	2	—	—
Foundries—brass & iron . . .	3	4	2	2	2
Machine manufactories . . .	4	5	5	4	4
Maltsters . . .	—	10	2	2	2
Organ-builder . . .	—	—	1	1	1
Pottery . . .	1	1	—	—	—
Salt-manufactory . . .	1	1	1	1	—
Ship-builders . . .	—	—	1	2	2
Smelting works . . .	—	—	—	—	2
Snuff and tobacco manufactories . . .	1	3	1	1	1
Soap and candle manufactories . . .	4	4	4	3	2
Soap-makers . . .	—	—	—	2	2
Tanneries . . .	7	8	6	7	7
Water-works . . .	1	1	1	1	1

The return for the year 1848 is given from the Blue Book at the Colonial-office; but, excepting the works for smelting copper, there does not appear to have been any increase in the manufacturing establishments for the last few years.

The mechanics in the colony are said to be skilful workmen, and the machinery made is of first-rate character. Seven vessels of a small size have been built at Adelaide,

and they are creditable specimens of naval architecture.

AGRICULTURE.—The neglect of this staple source of prosperity, during the early days of the colony, has been previously stated. Ample amends have since been made for this inattention; and the progressive increase of cultivation is shown in the annexed statement of the acres in cultivation from the year 1840 to 1848:—

Year.	Number of Proprietors.	Wheat.	Barley.	Oats.	Maize.	Potatoes.	Garden.	Vineyard.	Total.
1840	—	1,059	388	424	192	440	—	—	2,503
1841	—	4,154	897	501	714	456	—	—	6,722
1842	873	14,000	2,700	700	850	690	850	—	19,790
1843	1,300	23,000	3,300	790	290	470	840	—	28,690
1844	1,357	18,980	4,264	1,045	241	397	761	—	26,918
1845	1,209	18,838	4,312	1,485	86	459	63	—	—
1846	1,714	26,134	3,489	1,963	106	590	896	111	—
1847	1,837	25,920	5,840	2,946	161	381	993	198	36,440
1848	1,846	29,737	8,479	3,977	4,602	591	1,300	219	48,911

The estimated average per acre is—for wheat, 21 bushels; barley and oats, 25; potatoes, 4. The number of acres enclosed was, in the year 1847, 94,684; and in 1848, 125,643.

The state of each district is shown by the following account of the number of acres in crop in 1848, which shows that, on an average, each landed proprietor has about twenty-seven acres of land under cultivation:—

Districts in 1848.	Number of Landed Proprietors.	Wheat.	Barley.	Oats.	Maize.	Potatoes.	Garden.	Vineyard.	Total Acres.
Adelaide	978	12,744	4,949	2,517	4,579	211	819	171	25,990
Encounter Bay	39	577	81	11	10	12	15	2	708
Gawler Town	232	5,153	1,727	233	6	43	178	22	7,361
Mount Barker	388	6,834	960	767	4	289	187	18	9,058
Mount Remarkable	20	95	20	171	2	16	32	2	338
Port Lincoln	18	45	17	28	—	3	12	2	107
Willunga	171	4,289	725	250	2	22	56	3	5,247
Total	1,846	29,737	8,479	3,977	4,602	595	1,300	219	48,911

Up to the 1st of January, 1849, the number of acres surveyed in South Australia was 465,943; add proportions for roads, 22,641; for the city of Adelaide and park, 3,400; total, 491,984. The number of acres selected was 159,188. In the surveyed lands, 198,997 acres were special; and of these, but 52,400 were selected.

The agricultural and horticultural products are similar to those of the Australian colonies previously described. The vine thrives well, and the product of wine and brandy is increasing.

South Australia was, on its foundation, in 1836-7, supplied with live stock from New South Wales and from Van Diemen's island. Large parties of "overlanders" arrived at Adelaide by travelling along the banks of the Darling, Murrumbidgee, and Murray rivers. The number of stock as-

essed for the years 1839, 1844, 1845, 1846, and 1847, was—

Year.	Horses.	Horned Cattle.	Sheep.
1839	800	7,600	108,700
1844	902	22,711	355,689
1845	1,044	26,146	480,669
1846	1,826	56,986	681,374
1847	1,705	56,375	784,811

Note.—The horses and horned cattle are above the age of six months, and the return of sheep includes weaned lambs.

The Blue Book for 1848 only contains returns for the Adelaide district, viz.—horses, 686; horned cattle, 55,083; sheep, 838,394. It is stated that there are now in the whole province—horses, 5,000; horned cattle, 70,000; sheep, 1,000,000; goats and pigs, 20,000. The increase of sheep is computed at twenty per cent. per annum.

In 1843-4, Mr. Ridley, an intelligent South

Australian colonist, invented a machine which reaped and threshed the corn at the same time. The machine is driven forward by two horses; at the fore end are six prongs, three on each side, which embrace the entire width of the wheel-track, and serve to collect the ears into the narrower range of teeth, which extend into a cylinder, in the form of a comb; between these teeth the neck of the straw passes, and the head or wheat-ear is guided into the lower cylinder, where it is caught by the "beaters," which make 600 revolutions per minute. The grain is beaten out of the ear, and thrown up a curve, whence it falls into the receiving-box, at the bottom of the cart, and the chaff flies off by a sort of chimney, at the upper and back end of the cart. This invention would only answer in a climate where the corn was so dry that it would separate from the chaff at the first blow of the beater. With two horses and two men, a farmer may thus reap and thresh a field at the rate of one acre per hour.

PRICES IN 1848.—Wheat, 4s. 6d. per bushel; barley, 4s. 6d.; oats, 4s.; maize, 3s.; potatoes, per ton, £3 10s. to £5; grapes, per lb., 2d. to 9d.; peaches, per dozen, 4d. to 8d.; melons, per cwt., 5s. to 6s.; apples, per lb., 5d. to 9d.; nectarines, per dozen, 6d. to 9d.; wheaten flour, per barrel of 196 lbs., 22s. to 29s.; wheat, per imperial bushel, 3s. 9d. to 5s.; wheaten bread, per lb., 1¼d. to 1¾d. Horned cattle—cows, £2 to £5; steers, £1 15s. to £3; working bullocks, £3 to £5. Horses, £15 to £20. Sheep—ewes, 4s. to 6s.; wethers (60 lbs.), 7s. Goats, 3s. to 5s.; swine, 6d. per lb.; milk, per pint, 2d.; butter, fresh, 1s. 2d. to 1s. 8d. per lb.; salt, 1s. to 1s. 3d.; cheese, 9d.; beef and mutton, 2½d.; pork, 6d.; rice, 3d.; coffee, 10d.; tea, 2s.; sugar, 3d. to 3½d.; salt, 1d.; wine, per dozen, 25s.; brandy, per gallon, 21s.; beer, colonial, per hogshead, £4 2s. 6d.; foreign, £7 to £8; tobacco, per lb., 3s. 6d.

WAGES FOR LABOUR IN 1848.—*Domestic*, male, £25 to £32 per annum; female, £14 to £22. *Predial*, £31 to £39 per annum.

Trades.—Bakers, 4s. to 5s. per diem; blacksmiths and wheelwrights, 6s. 6d.; bricklayers, masons, and plasterers, 7s. 6d.; brickmakers, per 1,000 bricks, 35s.; butchers, 3s. 6d. to 4s. 2d. per diem; bullock drivers, cabinet and carriage makers, coopers and carpenters, 7s. 6d.; saddlers, 6s.; shoemakers, 7s. 6d.; sawyers, per 1,000 feet, 9s. 6d.; shepherds, with board and lodging, average £31 4s. per annum; porters, per hour, 7d. to 8d.; farmers, 5s. per diem.

The colony is greatly indebted for its foundation (see p. 638), and for the interest which has been felt in England for its welfare, to an association termed the *South Australian Company*, which in June, 1850, held its fourteenth annual meeting, and declared a dividend of four per cent. per annum, free from income-tax. The objects of this company were, the purchase and improvement of lands, and their lease and sale, when so improved. It has also introduced improved breeds of stock into the colony, and worked some mining property. Meritorious efforts have been made for the construction of wharfs and warehouses at Port Adelaide, where ten ships may now load or unload, as if they were in the London Docks. The company seem now to be directing their more special attention to leasing land, of which they possess about 60,000 acres; offering it on the following favourable terms to settlers:—

"Engagements for leases for a term of twenty-one years, at very moderate rates, with a right of purchasing the freehold.

"The sections, as marked off by the government surveyors, contain either 80 or 134 acres; so that the farms will consist of 67, 80, 134 acres, or any larger quantity, as may be agreed on.

"The company's manager will point out five portions of freehold land, each equal to the quantity to be leased, and from them the tenant may select one. The yearly rent will be 4s. per acre, during the first period of seven years—5s. per acre, during the second period of seven years, and 6s. per acre, during the third period of seven years.

"In order to provide for the due cultivation of the farm, every applicant should possess a small amount of ready money, to be deposited (on signing the agreement) with the company, in London; and for which (without any deduction) an order will be given on their manager in the colony. The lease will stipulate, that the amount shall be expended solely in improving the land; and the lowest sum recommended to be thus deposited as farming capital, for a farm of 67 or 80 acres, is £150; and for a farm of 134 or 160 acres, £300. It is advisable, however, that every tenant should have, either from his own resources, or his friends' assistance, nearly as much capital besides, as he must incur expenses for outfit, reaching the ship, purchasing implements, freight of extra baggage and stores, &c., &c.; and ought to have a small amount available for use, on his landing in South Australia. To accommodate settlers possessed of limited means, the company will not object to two partners being associated in a lease, provided their respectability and other qualifications be ascertained; and should the tenant need assistance to erect farm-buildings, or to fence his land, the company will aid him with an advance proportionate to the capital expended by him on the farm, for which advance the rate of interest current in the colony will be charged.

"This advance, or loan, will be made after the approved expenditure upon the farm of the capital deposited by the tenant, and may be repaid by instalments; after repayment, the tenant will gene-

rally have a right, at any time during the lease, to purchase his farm, with all fixed improvements. The price of purchase will be specified in the lease, and will vary according to the period at which the right is claimed."

A clause is inserted in the lease, "giving the farmer, in the event of his being dissatisfied with all the portions of land offered him by the colonial manager, the option, within a specified limited time, of cancelling the engagement, on payment of the trifling expenses incurred."

The following is a summary of the revenue for the last year:—

Rental of the town property	£2,197
Ditto of port buildings, and receipts from wharf	5,650
Ditto of country lands	6,648
Profit on sales of land—town, port, and country	3,107
Net proceeds of wool	5,662
Sales of sheep to the butchers, including value } of those killed for rations }	1,839
Total	£25,105

The total current expenditure in the colony, exclusive of that connected with the mining operations, was as follows:—

Salaries and wages in Adelaide	£958
Miscellaneous charges there	429
	—£1,388
On account of the sheep	5,229
Ditto of the town and port property and coun- } try lands }	1,079
	7,697
The total amount of salaries and } charges in London during this last } year, including the income-tax, is }	£1,691
Interest on debentures, &c.	921
	— 2,612
	£10,310

As population increases, and the prosperity of the colony is augmented, there will of course be a proportionate improvement in the value of the property of the South Australian Company.

The rental received by this company, for town, port, and country lots, during the past six years, has been—1844, £5,984; 1845, £5,988; 1846, £7,084; 1847, £8,542; 1848, £11,034; 1849, £14,496.

PRESENT POSITION OF SOUTH AUSTRALIA.

—The details given in the previous pages testify that this fine province, after passing through the ordeal of inordinate land speculations in 1836, '7, '8, '9, and of mining speculations in 1845, '6, '7, has now attained a sound position; and that its prosperity, at length established on a solid basis, may be reasonably expected to steadily increase.

The extraordinary height to which the land mania had arrived, may be seen from the following data. The injurious and enervating effects need no comment; it needed all

the inborn energy of the colonists to bear up against them; yet they did so right manfully, and, by the blessing of God, with success.

Early in the year 1838, Mr. R. Fisher sold an acre in Gouger-street (No. 387) for £410; the original cost in March, 1837, was £8 10s. In 1839, Mr. T. Y. Cotter, sold half-an-acre (No. 144 in Grenfell-street) for £755. The cost of the acre lot, in the previous year, was about £10. Mr. D. Macfarlane purchased one acre from Sir James Malcolm, in Rundle-street, nearly opposite Messrs. Russell and Freeman's warehouses, and having upon it buildings over-estimated at £500, for the sum of £2,000. Mr. Thomas, the government printer, sold one of his 137 acre sections, on the Torrens, about three miles from Adelaide, for £1,300 cash; the section cost him £80, in 1836. Mr. Flaxman sold, to the German community of Klemzig, 2,000 acres, of a special survey on the Para river, for £20,000. Suburban sections, at Hindmarsh and Walkerville, which sold in July, 1838, for £10 an acre, brought, in 1839, from £45 to £100 per acre. Even at Port Lincoln, allotments, that cost the previous year £20, sold for £120; and £300 were refused for half an acre water frontage.

The bubble of high prices for land burst, and the people betook themselves to the steady pursuits of industry. They cultivated the soil, obtained ample returns for their labour, but found no market for their surplus produce. In 1844-5, copper and lead ores were discovered, and a mania arose for mining operations, by which many have suffered considerably, and were obliged to sell their lands. The following is a return of the amount of mortgages on land registered during the years 1844, '5, '6, and '7:—

Lent on	1844.	1845.	1846.	1847.
Town lands	£1,155	£5,434	£5,089	£6,203
Country lands	13,860	6,997	30,651	27,308
Town & country lands	5,022	30	1,500	529
Total	20,038	12,462	37,240	34,041

The liability by bills of sale, judgments, and warrants of attorney, registered during the years 1844, '5, '6, and '7, was—

Securities.	1844.	1845.	1846.	1847.
Judgments	£532	£994	£10,478	£20,412
Bills of sale	16,395	12,983	49,659	22,229
Warrants of attorney	5,206	9,783	10,741	939
Total	22,133	23,761	70,879	43,581

The number and nature of writs which passed through the sheriff's office during the years 1844, '5, '6, and '7, were—

Nature of Writs.	1844.	1845.	1846.	1847.
Capias ad satisfaciendum	11	20	14	10
Capias	10	6	11	13
Fieri facias	22	30	24	28
Habere facias possessionem	—	1	—	3
To levy fines	1	—	2	2
Habeas corpus	1	—	—	—
Attachment for contempt	1	—	3	—
Total	46	57	54	56

of South Australia during the years 1844, '5, '6, and '7 :—

On Petition of	1844.	1845.	1846.	1847.
Creditors	2	1	—	2
Imprisoned debtors	8	13	6	12
Debtors at large	—	12	10	7
Total	10	26	16	21

All accounts now represent a more steady industrial progress in mining, as well as in agriculture; and I doubt not that every succeeding year in which the facts may be registered, in continuation of the accompanying comparative tabular view of the state of the province, will exhibit yet more remarkable evidences of the welfare of this promising section of the British empire.

The following is a return of the number of fiats in insolvency issued in the province

General Condition of South Australia at the close of each year since 1840.

In the Years	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.
Inhabitants in the Province	14,610	..	..	17,366	18,999	22,390	25,893	31,153	40,778	50,000
Do. in Municipality of Adelaide	8,489	..	..	6,107	..	7,413	..	..	..	..
Do. Rural Districts	6,121	..	..	11,259	..	14,977	..	..	..	..
Public houses in Adelaide, Port Adelaide, and Albert Town	70	67	44	34	37	45	58	66	..	..
Do. in the Country	37	38	37	33	33	40	60	66	..	..
Convictions for crimes and misdemeanours	47	37	36	31	21	22	40	31	53	..
Flour Mills . . . . .	..	..	..	16	21	24	26	25	25	..
Manufactories	4	..	..	31	35	59	44	51	..	..
Acres in Cultivation	2,503	6,722	19,790	28,690	26,918½	26,218½	33,292½	36,440¼	48,917	..
Value of Exports of Colonial Produce in £	15,650	31,826	29,079	66,160	82,268	131,800	287,059	275,115	465,878	374,156
Amount of Government Expenditure in £	169,966	104,471	54,444	29,842	29,453	32,099	37,207	58,979	80,129	82,638
Do. Revenue in £	30,199	26,720	22,074	24,142	27,878	36,182	48,017	67,027	82,847	94,200

Note.—In 1849 the immigrants to the colony were:—from Great Britain, 12,501; British Colonies, 2,038; Foreign Countries, 1,627—total, 16,166. Departures from the colony to Great Britain, 131; British Colonies, 2,393; Foreign Countries, 170—total, 2,694.

It may here be observed, that in some returns, the proceeds of the land sales are included as revenue, in others they are excluded. In the statement at p. 695, the land revenue is excluded. A document laid before Parliament on the 5th July, 1850 (No. 511), gives the undermentioned financial statement of the expenditure for nine years. [For continuation see Supplement.]

Shipping at Adelaide in 1849.

Countries.	Inwards.		Outwards.	
	No.	Tons.	No.	Tons.
Great Britain	95	46,507	25	9,747
British Colonies	165	28,173	209	51,738
Foreign States	17	5,988	38	13,812
Total	277	80,623	272	75,297

Year.	Ordinary Revenue (fixed and incidental.)	Bills drawn on her Majesty's Treasury.	Bills on the Colonization Commissioners.	Proceeds of other Bills.	From Land Sales.	Loans and Transfers from Land Fund.	Total.
1840	£31,879	—	£129,273	£4,990	—	£9,955	£176,097
1841	28,550	£27,154	23,853	3,000	£2,602	5,692	90,851
1842	25,034	36,607	—	—	17,830	—	79,471
1843	24,779	6,252	—	—	411	200	31,642
1844	27,879	2,475	—	—	—	3,587	33,941
1845	35,574	—	—	—	—	15,609	51,183
1846	48,018	—	—	—	—	—	48,018
1847	67,028	—	—	—	—	—	67,028
1848	82,912	—	—	—	—	—	82,912

BOOK V.—WESTERN AUSTRALIA.

CHAPTER I.

POSITION, AREA—AND EARLY HISTORY OF SETTLEMENT.

THIS division of Australia, generally known as the "Swan River" colony, comprises all that portion of the island-continent situated to the westward of the 129th degree of E. long., and extends between the parallels of 13° 44' and 35° S.; is bounded on the south by the Pacific, on the west-north-west by the Indian Ocean, on the north by the Arafura Sea, and on the east by the meridian line above-named. The length from north to south is computed at 1,280 miles, and the breadth from east to west at 800 miles; the area is about 1,000,000 square miles, or more than eight times the size of the United Kingdom of England, Wales, Scotland, and Ireland.

HISTORY.—The "Swan River Settlement" has been a bye-word and a reproach, frequently cited by the advocates of the so-called Wakefield system to illustrate the evils of a different plan of colonization, while defending themselves from the blame so unsparingly bestowed upon them during the period of distress and depression under which South Australia laboured. In the previous book I have expressed my conviction, founded upon the facts therein stated, that the latter colony could not, either in its prosperity or its adversity, be fairly used as a general argument on one side or the other; it remains to be seen whether the Swan River settlement in its turn presents any tenable ground for the sweeping assertions in support of which it is adduced, mainly on the score of its having been "*a complete failure.*"

Even were this the case, it would not necessarily follow that the original plan was the sole cause of so unfortunate a result; for the grievous errors and inconsistencies by which the practical working of the most carefully-framed human system may be perverted, and the very existence of a colony endangered, is painfully evident in the early history of too many British colonies, though counterbalanced by the energy, the industry, and the sound principles of government apparently inherent in the minds of the settlers themselves.

In the present instance a succinct account of the history of the Swan River settlement will furnish data on which to found an opinion of how far the stigma attached to it as a total failure is really merited, and the causes to which that failure, or, on the other hand, the slow advances which it is admitted, even by its best friends, to have made, can be fairly attributed.

The term *Swan River* was given to this portion of Western Australia by Vlaming, a Dutch navigator, who discovered it in 1697, and found in the neighbourhood many black swans. In 1801, the French corvette *Naturaliste* visited this coast, and M.M. Bailly and Heirisson, on 17th June, entered the river Swan in a cutter, observed large flocks of black swans, pelicans, and parrots, and were surprised, after three days' explorations, with the forests and geological formation of the country.

Public attention was first directed in England to Western Australia by Captain (now Sir James) Stirling, R.N., who, when in command of H.M.S. *Success*, made a report, dated the 18th of April, 1827, pointing out the advantages of our occupying this portion of that vast island, and thus prevent the execution of a project then entertained by the French government for the formation of a Gallic Australian settlement.

Early in the year 1829, Captain Fremantle, R.N., of H.M.S. *Challenger*, hoisted the British flag near the entrance of Swan River, and took formal possession of the territory on behalf of the British crown, in the name of his Majesty George the Fourth. A portion of the country now included in the limits of Western Australia, situated on the south coast, and termed King George's Sound, was occupied in 1825-6, by a detachment of troops and persons sent from Sydney under the command of Major Lockyer. This detachment was withdrawn in the year 1830-1.

It was generally understood that his Majesty's government would not undertake

at the public cost the formation of a settlement on the western coast, a proposition was therefore made on the part of Thomas Peel, Esq., Sir Francis Vincent, E. W. Schenley, Esq., and others, to further the views of government in founding a colony at little or no expense to the mother country. These gentlemen offered to provide shipping for the conveyance of 10,000 British subjects within four years from the United Kingdom to the Swan River, furnished with provisions and every other necessary, and to maintain three small vessels running to and from Sydney, as occasion might require. They estimated the cost of conveying this number of emigrants at £300,000, or £30 per head, and required in return an equivalent grant of land at the rate of 1s. 6d. an acre, making 4,000,000 acres, out of which they would engage to provide every male emigrant with no less than 200 acres of land, rent-free. This project fell to the ground owing, I believe, to the inability of the proposers to satisfy the government as to the adequacy of their means of carrying it into effect, and another plan for the execution of the same object was issued in December, 1828, from the Colonial-office, of which department Sir George Murray was then the chief.

According to this project no expense was to be incurred by the government, either in conveying emigrants, or supplying them with provisions on their arrival; but intending settlers reaching Swan River before the close of the year 1830, were to receive in the order of their arrival allotments of land, rent free, at the rate of forty acres for every sum of £3, which they could prove themselves to the satisfaction of the Lieutenant-governor, prepared to invest in the improvement of the land. Those who should incur the expense of taking out labouring persons were to be entitled to an allotment of land, at the rate of 200 acres, considered equivalent to £15 for the passage of every such person, without reference to any other grants of which they might become possessed. In the class of "labouring persons" were included women, and children above ten years old. With respect to the children of labouring people under that age, it was proposed to allow forty acres for every child above three years old; eighty acres for every child above six years old; and 120 for every child above nine, and under ten years old.

The title to the land was not to be granted

in fee simple, until the settler had proved, to the satisfaction of the Lieutenant-governor, that the sum required (*viz.* 1s. 6d. per acre), had been actually expended in some investment, or in the cultivation of the land, or in solid improvements, such as buildings, roads, or other works of that kind.

Any land, thus allotted, of which a fair proportion, at least one-fourth, should not have been brought into cultivation, or otherwise improved, to the satisfaction of the local government, within three years from the date of licence of occupation, was to be liable to one further payment of 6d. per acre for all the land not so cultivated or improved, into the public chest of the settlement; and, at the expiration of seven years more, so much of the whole grant as should remain in an uncultivated or unimproved state was to revert absolutely to the crown. Every grant was likewise to involve the condition, that, at any time within ten years from the date thereof, the government might resume, without compensation, any land not then actually cultivated, or improved, as before-mentioned, which might be required for roads, canals, or quays, or for the site of public buildings.

Under the head of *investment of capital*, his Majesty's government agreed to include stock of every description, labourers, provisions, all implements of husbandry, and other articles applicable to the purposes of productive industry, or necessary for the establishment of the settler on the land; the amount of any half-pay or pension receivable from his Majesty's government was also to be considered as so much capital. After the year 1830, land was to be disposed of to those settlers who might resort to the colony on such conditions as his Majesty's government might then determine.

Mr. Thomas Peel, aided, to the extent of £20,000, by the late Mr. Solomon Levy (then of the firm of Cooper and Levy, of Sydney and London), undertook the responsibility of making the first efforts for the foundation of the colony. Mr. Peel was to receive 250,000 acres, on condition of taking out 400 emigrants, with liberty to extend the grant to 1,000,000 acres, previous to the year 1840, by receiving 40 acres for every child above three years, 80 for every child above six, up to ten years 120, and exceeding that age and upwards 200 acres for each person conveyed to the colony.

Colonel Latour also availed himself of the governmental terms, took out settlers, stock,

&c., and became entitled to a tract of land of considerable extent.

At the first glance it may appear that this extensive tract was granted on very easy terms, but it will not be thought so when the circumstances of the case are duly considered. The estimated cost of the conveyance of an adult from the United Kingdom to the west coast of Australia was then about £30; no supplies were procurable on the spot, and the distance from Sydney (1,134 miles), together with the difficulty of doubling the south-west coast from the eastward for six months in the year, rendered the establishment of a colony at the Swan River twenty years ago an extremely expensive and arduous undertaking, and a very different matter to the creation of settlements at Port Phillip and Adelaide eight years later. To these latter places it must be remembered that sheep, cattle, and horses were driven overland at a comparatively small cost from the southern pastoral districts of New South Wales by the same route, and by a short sea voyage from Van Diemen's land; surplus labour was also obtained from the older colonies, whereas stock brought into Western Australia was necessarily imported by sea, and it was estimated that each sheep, including freight, insurance, and allowing for losses, cost the colonists £20.

By the exertions of Mr. Peel, of Colonel Latour, and other gentlemen, his Majesty's government was enabled to announce that a settlement would be formed on the west coast of Australia; Captain Stirling, R.N., was appointed civil superintendent, with authority to select a grant of land for himself to the extent of 100,000 acres; and early in the year 1829, a number of emigrants left England to form the new colony. The government of that day were certainly to blame for the want of forethought which marked this stage of the proceedings; no survey of the land had been made, nor any inquiries as to its resources; no system was organized, no public or corporate body in England was responsible for the due management of the expedition, and the consequences of these omissions were most distressing. Not even a secure anchorage had been ascertained.

* On the 1st June, 1829, the *Parmelia* transport arrived at Swan River, with Captain Stirling as chief, and several of the government officers for the new colony. On the 8th June, H.M.S. *Sulphur* arrived, with a detachment of H.M. 63rd regiment, under the command of Captain Irwin. On the 17th, the first public proclamation was issued, and the appointments

The settlers were landed on the beach, in mid-winter, in the neighbourhood of a bare limestone rock, the country around devoid of agricultural or pastoral capabilities, but filled with hostile savages. The settlers began to arrive in the middle of the year 1829,* and by the end of the same year, twenty-five ships had reached the new settlement; the number of residents were stated to be, 850; of non-residents, 440; number of cattle, 204; of horses, 57; of sheep, 1,096; of hogs, 106; and the value of property giving claims to land, was quoted, during these few months, at £41,550; the value of cargo left by ships, up to the end of December, was £50,428. In 1830, the number of immigrants increased; in January, 6 vessels arrived; February, 5; March, 4; April, 1; May, 6; July, 2; August, September, and October, each, 1; November, 2; and December, 1 = 30. The number of settlers brought by these ships was, 1,125; and the cargo left at the new town of Freemantle by them, was valued at £144,177. In 1831, the arrivals were less frequent, and the vessels numbered only 17; and after the first quarter, 1832, the immigration of persons and property ceased, except so far as related to the friends and funds of persons previously established in the colony. During this period, the amount of property introduced into the colony by the immigrants, on which applications for land were based, amounted to £120,000, and consisted of live stock, implements of husbandry, provisions, wearing apparel, furniture, and other goods.

Officers of the army and navy, and the officers on the civil establishment of the colony, were authorized by Sir George Murray to receive assignments of land on the terms of importation of property which were open to the public. To some naval and military officers who engaged to return to the settlement at an early period with the property necessary to qualify them to receive allotments, permission to select land was granted, and the territory so selected was *reserved for a considerable period*. Thus, many of the settlers who arrived in 1829 and 1830, on expressing a desire to possess themselves of lands in favourable localities, of the official authorities notified. In August the *Calista*, *St. Leonard*, and *Marquess of Anglesea* arrived, with colonists, stock, and merchandise. In October nine vessels reached the Swan River, with settlers and stock; in November, two ships; and in December the *Gilmore*, with Mr. Peel and 170 passengers.

conformable to the amount of property then in their possession, were informed, "that ten thousand acres is reserved for Captain A.; that six thousand acres to Lieutenant B.; that five thousand acres to Mr. C.;" and so on, over the best situated applotments. Between June, 1829, and the close of 1831, the quantity of land assigned to or reserved for, civil, naval, and military officers, was as follows:—*Civil*, 19 persons, 162,062 acres; *naval*, 16 persons, 33,680 acres; *military*, 11 persons, 30,862 acres. There were also reservations for 15 private individuals, of 60,880 acres.*

Thus nineteen of the civil servants of the crown, selected and reserved for themselves, naturally out of the best lands, applotments which averaged to each about 8,530 acres.† In this list the governor (Sir James Stirling) stands marked for 100,000 acres, which he received by special award from Sir George Murray, then her Majesty's secretary for the colony. This immense grant was selected in different places, and is stated to have been shifted from time to time, according to the prospective value of new positions.‡

The colonial secretary received 5,066 acres; harbour-master, 7,592; colonial surgeons, 5,000 each; colonial naturalist, 5,000; storekeeper, 5,000; surveyor-general, 5,600; collector of revenue, 5,000; colonial chaplain, 5,020; civil engineer, 4,400; draftsman, 2,560; clerk in survey office, 1,280; and a Captain Butler, whose name appears among the civil officers, 2,560 acres. It is presumed that all these civil officers brought

* See Parliamentary Paper, No. 685, of 6th August, 1838, for details.

† It is said that the colonial authorities of 1829 gave the official servants of the crown who went out to found the Swan River colony, profuse grants of valueless lands, as compensation for the small salaries awarded to them.

‡ It is, however, due to Sir James Stirling, who possesses a high character in his profession, to state that great credit is due to him for the manner in which he surmounted the errors committed in the early proceedings of the colony. After the first disasters, he infused a new spirit into the desponding settlers, and it is mainly owing to his perseverance and unconquerable determination to succeed, that the place was not utterly abandoned.

§ Mr. Peel was ruined by his exertions to promote the establishment of the colony, at its commencement, and on 31st March, 1847, he was still in debt to her Majesty's government, £3,828, incurred by introducing a valuable body of men into the settlement. In 1847, the acting governor, with a view to the liquidation of part of this debt to the crown, agreed to accept the surrender of a block of land of 1,372 acres, at 20s. per acre

property into the colony, in conformity with the official regulations.

Among the naval grantees were the names of Captains Dance, of H.M.S. *Sulphur*, and Freemantle, of H.M.S. *Challenger*, each 5,000 acres; and Sandilands, of H.M.S. *Comet*, 2,560 acres. Lieutenants, mates, masters, and surgeons of those vessels had grants appropriated to them, varying from 1,280 to 3,840 acres. None of these gentlemen could, of course, leave their ships, and most of the grants were reassigned, or remained unoccupied and unassigned.

Among the military grantees were captains Irwin and Mackie, of the 63rd regiment, 10,000 acres; Deputy Assistant-commissary-general Lewis, 5,012 acres; Lieutenant Dale, 63rd regiment, 448 acres. Among the private individuals, for whom 60,880 acres were reserved, was the name of Mr. Gellibrand, for whom 10,000 acres were reserved, on the promise of his importing into the colony a sufficient amount of property to entitle him to the selection. The other reservations varied from 3,000 to 9,000 acres. Moreover, in the years 1829, '30, and '31, there were reserved for townships nearly 100,000 acres (98,590). For the town site of York alone, 38,400 acres were reserved; for Plantagenet, 17,000; for Clarence, 7,680; for Perth, 3,840. London, with upwards of 2,000,000 inhabitants, does not cover, probably, more than ten square miles = 6,400 acres.

With these antecedents, it would have been difficult for men§ unconnected with government, and unaided by public support,

= £1,372, which was contiguous to the town site of Rockingham; the said block containing the deepest water-frontage in Mangle's bay, on which the town is situated. Major (now colonel) Irwin, who has laboured zealously for the benefit of Western Australia, gives Mr. Peel credit for introducing men of good conduct, who were well acquainted with farming pursuits and handicrafts, and for bringing into the colony, towards the fulfilment of his contract, a population of 300 souls, with a property of £50,000.

Another instance of great hardship is recorded in the correspondence of the colonial office. Captain Bannister, formerly high-sheriff of Van Diemen's Island—an officer of great energy and considerable talent—accomplished, in 1831, after enduring much danger and privation, an exploratory over-land journey, in seven weeks, from Perth to King George's Sound; yet this gentleman declares himself to have been driven from the colony by the unjust treatment he experienced regarding the land allotments. A Mr. William Wise introduced property into the settlement to the amount of £1,984 (irrespective of ready money, which gave no claim for land,) and accordingly, under the regulations of December,

to have formed a colony, even in the loveliest and most fertile land on earth; and it is surprising that the attempt was not abandoned in the outset. The frightful struggles, which the settlers of 1829-30 had to undergo, are described in a "monster address," signed by nearly every non-official settler (including the magistracy, &c.), and presented to the governor of Western Australia, by a deputation of the leading gentry, in the presence of the members of the Executive and Legislative Councils. This address was transmitted by the governor to Earl Grey, and may be found at length in the Parliamentary Emigration Papers for 1849-50.

The grievances therein complained of, deserve mention, not only as forming a chief cause of the slow progress made by the colony during ensuing years, but also as affording a valuable example of what *should and should not be done* on similar occasions. The errors in this case appear to have arisen chiefly from sheer carelessness, and the most unaccountable want of forethought on the part, it would appear, of all concerned. Had the proposal been to colonize one of the Channel Islands, instead of to form a settlement in the southern hemisphere, matters could hardly have been taken more easily.

1828, was officially informed by the colonial secretary, that he "had entitled himself to a grant of land to the extent of 26,453 acres." Mr. Wise received his "location order," which cost him, in actual outlay, £1,001 5s. 9d.; there was no surveyed land of which he could make sure, and after the waste of the substantial property he had introduced into the colony, Mr. Wise, for the sake of his family sold his "location order" to Captain Bannister, and proceeded to Van Diemen's Island. But from that day to this, Captain Bannister has never been put in possession of the land to which he had thus become entitled, and most probably will never receive an acre or a shilling for his property.—(See correspondence with the Secretary of State for the Colonies in 1836-7.)

* The following extracts from the address before alluded to, paint in glowing language a vivid, but, it is to be hoped, somewhat exaggerated picture of the suffering which attended the foundation of the Swan River settlement:—

"The entire material of a settlement, the official staff, settlers, property, and live stock, were hurried out to an unknown wilderness before one acre was surveyed, before one building had been erected, before even a guess had been formed as to the proper scene of their labours, before the slightest knowledge had been obtained of the soil, climate, products, or inhabitants. Nay, further, it was absolutely made a condition of the grants of land, that the emigrant should not only arrive, but bring his family, dependents, and property, into the colony while in this state.

"The ghastly spectacle of the town-site of Clarence

The manner in which the terms for the grant of land were framed rendered its acquisition dependent on arrival in a stated time, and induced the emigrants to bring out in excess servants, live stock, machinery, &c., of which each took more than he required. The season selected for their arrival, in a country known to contain hostile natives, was the month of June (there mid-winter). Not a shed had been provided for their reception; not an acre had been surveyed; and, as before stated, even a safe anchorage had not been ascertained. Several ships were dashed to pieces on the beach, which was crowded with masses of human beings—families with infant children, ladies, civil officers, sailors, soldiers, and farmers; while blood and cart horses, milch cows, prize bulls, sheep, goats, poultry, pigs, pianofortes, ploughs, mills, barouches, casks, furniture, bedding, tools, and seed-corn lay heaped together, drenched with torrents of rain.

The confusion was complete; the leaders of the enterprise were equally at a loss with the settlers to know what to do or advise. Some demanded to be led to their lands; others gave way to despair: servants attacked the spirit-casks; masters followed their example.* The farmers were told they must wait, *wait* till lands were discovered—its sole edifices crowded, hurried, and neglected tombs—its only inhabitants corpses, the victims of disease, starvation, and despair—the sea-beach strewn with wrecks—the hills and borders of the rivers studded with deserted and half-finished buildings—bear witness to these consequences, and speak of brave men, delicate females, and helpless children, perishing by hundreds on a desert coast from want of food, of shelter, and even of water, and surrounded by armed hordes of angry savages. It were wholly impossible, sir, to estimate the vast amount of property of every sort buried for safety in the sands of the shore, and never again recovered, or the multitude of most valuable and high-bred stock of all descriptions, whose skeletons whitened the beach or filled the morasses they had been forced to enter in the desperate search for even fresh water. Can we wonder, then, that thousands rushed from such a scene with the relics of their capital, to people other colonies; or even that numbers sat down in the frenzy of despair beside the spirit-cask, never to rise from it alive? Can we wonder that the name of Swan River should, throughout the civilised world, become identified with failure and ruin, and that the survivors of such carnage should be left alone by their fellow-men to carry on an enterprise so dreadfully begun? Or may we not rather indulge in a justifiable pride in the resources of a country and the energies of a people who, from such a commencement, have, under Providence, elaborated even the civilization which your excellency may already see around you? But these terrible scenes, brought on by the unjustifiable attempt

covered, and then *wait* until they were surveyed. In fine, a quarter of a million sterling of property was destroyed; the means of the immigrants dissipated; their live stock perished; many died; and numbers, as soon as practicable, fled from this scene of ruin, carrying with them the wreck of their fortunes. I have been assured by a colonist of high character, and holding an official position, that fifteen years elapsed before the surveys were sufficiently advanced to enable a settler within five miles of the capital to put up a boundary fence.

Mr. James Walcott, one of the first settlers, says—"I was, in common with many others, a severe sufferer, from the fact of the government being unable to redeem its pledge to the colonists arriving in 1829 and 1830 at the Swan River settlement. It was not till several months after my arrival that I was offered a very small grant on the Swan, by the local government, and then only in consequence of its being vacated by another party. In the mean time most of the stock imported had died at Freemantle, where there was no keep for them—in fact, of actual want. I may say, with safety, that one-half of the property I imported was sunk before I could get a location which offered any prospect of success."

Subsequently, when the few, after gallantly penetrating the forest, and discovering good farm lands, had raised the drooping spirits of the rest, and a chance arose that a fresh body arriving, with new capital and stock, might do well, the land terms were changed to the same as the old-established colony of Sydney, where no hazards were to be run. Almost at the same time companies arose to push forward other colonies, each one naturally vaunting the advantages of its own, and disregarding, if not disparaging the merits of the rest; and the neglected little settlement of Swan River was soon forgotten, and left to establish the foundation of an infant nation

to hurry a colony into existence before steps had been taken for its security, are far from being the termination, or even the most injurious, of the errors which have plunged us into our present difficulties. At the very time when the unhappy immigrants were crowding on the beach, wasting and losing all their means, the conditions of their immigration told them that they had but a limited time to select and improve their grants. And more monstrous still, this time was actually expired before these grants were surveyed.

"A minor, but yet very ruinous error, consisted in limiting the investments of capital, which produced a vast accumulation of the same articles, and

unaided by aught but the resources of its country and climate, and its own patient but over-taxed energies. The effect of the non-arrival of fresh immigrants in a colony so peculiarly constituted may be readily conjectured. The hired labourer rapidly acquired the means of working on his own account, and became desirous in his turn of obtaining assistance, and the ruin of those who depended upon hired labour was the consequence. And here lies the secret of the so-called failure of Swan River. In one, and in only one, respect has it really failed, and that is in attracting emigration; in almost every other it has succeeded. Its trade has increased, crime among the Europeans is almost unknown, *and its present—who are in general its original settlers*—have in proportion to their numbers, effected a creditable extent of tillage, and evinced a very praiseworthy spirit.

Every one at all practically acquainted with the subject of emigration, is aware of the immense influence exercised by the powerful London companies in favour of the colonies in which they are respectively interested. Is it, then, strange that a settlement, ill supported by government, and unrepresented (excepting for a brief period by the Western Australian Company) in the mother country, should have proved incapable of attracting the stream of emigration which it was the object of so much combined exertion to direct elsewhere? Besides, the miseries endured at the foundation of the colony, naturally gave rise to a strong prejudice in its disfavour.

To return to the proposition stated at the commencement of this chapter, this present instance would appear to be one of the many in which the error lies not in the system itself, but in the absence of the needful preparation, as well as careful supervision necessary to its successful working. Any colony, *equally neglected at home, and*

total want of others, and of money. The majority of the imported articles could not be of use for some years, and each settler was induced to bring more than he required, in hopes of sale. The want of storehouses caused the destruction of all these. As if sufficient means had not been used to destroy our capital, the system of location duties was added; by which the settler was compelled to prove that he had wasted 1s. 6d. per acre in permanent improvements. The result was, the erection of multitudes of cottages, fences, &c., in remote, and at the time, wholly uninhabitable places, which were, of course, allowed to become the prey of the elements, as soon as the expensive farce had been performed."

founded with as reckless improvidence with regard to surveys and shelter, and preliminary preparations, must, like Swan River, have been crippled, if not crushed, whether established on the "sufficient price" or any other system. Even the large grants of land referred to in a previous page, would not in themselves have proved injurious but for the imprudence of the authorities in not requiring sufficient security for the fulfilment of the annexed conditions; even as it is they appear to have exercised in some respects a favourable effect by giving a motive for continued exertion much needed under the circumstances.

It is pleasing to know, as will be shewn in Supplementary observations on the colony, that the stationary state is passed, the development of the resources of the territory has commenced, and the tide of immigration is now setting in towards Western Australia.

With respect to the announcement relative to the disposal of crown lands in Western Australia, from the Colonial-office, December, 1828, 13th January, and 3rd February, 1829, granting land on certain conditions (see page 710) new regulations were issued from the Colonial-office, Downing-street, 20th July, 1830, by which 100 acres, valued at £15, were allowed for every labourer, including women and children above twelve years of age; 60 acres for every child between twelve and six years of age, and 30 acres for every child under six years of age. Lands allotted, if unimproved, to the extent of 3s. per acre, in two years, to be liable to quit-rent of 1s. per acre; if still unimproved in two more years, to revert to the crown, or be subjected to a higher quit-rent. The proportion of "capital," *i.e.* of stock, implements of husbandry, &c., which qualified settlers to receive land, was raised from 1s. 6d. to 3s. per acre. Subsequently the land sales' regulations adopted for the older Australian colonies were declared to be in force in Western Australia, where land is now only purchaseable from the crown at the minimum upset auction price of 20s. per acre. This high price has proved effective for the prevention of the sale of crown lands, for according to the evidence of Mr. Lefroy (an intelligent Swan River settler), before the House of Lords, 24th March, 1848—"There were in 1844 certainly quite a million of acres in the colony which could have been purchased for 3s. an acre." Much of this was probably poor land; and her Majesty's government, in a spirit of equity,

gave the original grantees, who had taken up injudicious and sometimes unavoidable allotments, an opportunity of exchanging *three* acres of bad land for one acre of good land. These "remission tickets" were stated in 1848 not to exceed £4,000 in value. The land alienated from the crown in Western Australia averages 350 acres for each man, woman, and child in the colony.

Before concluding this necessarily brief sketch of the origin of the colony, it is due to the settlement to notice the rise and fall of a company, whose failure has been unjustly ascribed to the character of the country.

The *Western Australian Association* had its origin in the meeting of an institution held in London, 23rd August, 1835, to watch over the interests of the colony. After several meetings and annual reports, a regularly organized joint-stock company was formed in 1841, under the auspices of Mr. Edward Gibbon Wakefield (one of the directors of the corporation), whose object was to purchase a large quantity of land in the colony from the original grantees, Sir James Stirling and Colonel Latour [to whom 113,000 acres were assigned, 29th Sept., 1829], at a cheap rate, with a view of selling it at the rate of £101 for 100 rural acres and four town sections of a quarter of an acre each; the choice of the allotments and town sections to be determined by lot.

A township or city, termed *Australind*, was to be laid out at Leschenault bay, "to extend over a thousand acres, exclusive of a reserve for public objects, such as quays, streets, squares, markets, churches, and public gardens." About this period Captain (now Sir George) Grey returned to England, bringing accounts of the fine country he had discovered in the neighbourhood of Champion bay (see topography), and stating also the existence of a good harbour adjacent. Nearly at the same time, it was announced that the extensive grants to Colonel Latour were forfeited to and reserved by her Majesty's government. This news, united with the representations of Captain Grey, induced the Western Australian Company to change their plan, and attempt the settlement of the northern district. The change, however, exciting considerable alarm, and the directors having offered to refund the capital of all who desired it, a large part of the subscriptions were withdrawn, and confidence in the enterprise paralyzed. Colonel Latour's claims

eventually proved to be valid, but the evil caused by their supposed forfeiture was irrecoverable.

The chief commissioner of the company, Mr. Clifton, left England in 1841, with the first detachment of emigrants. On reaching Port Leschenault, on his way to the new district, he received such communications from the governor, and such information respecting the supposed Port Grey, and the country in its vicinity, as induced him to found the colony under his charge on the spot originally contemplated, in Leschenault inlet, instead of at Port Grey.*

On the arrival of H.M.S. *Beagle*, Captain Stokes, accompanied by Mr. Clifton, proceeded to examine the territory concerning which statements so contradictory had been made; they sought in vain for the harbour, and described the country as unfit for the settler, being deficient in the three most necessary articles, water, timber for building, and food for stock.† Subsequent examinations have proved that Captain Grey's statements were, nevertheless, correct, inasmuch as there is a harbour now called Port Grey, and a fertile and extensive tract of country in its vicinity (see topography). But to return, Mr. Clifton, considering himself fully justified in the step he had taken, proceeded, with the counsel and concurrence of the local government, to establish the settlement on the shores of Leschenault inlet; setting aside the somewhat Utopian

[Note.—See Supplement and Appendix for continuation of History and Statistics to present period.]

arrangements and ground-plans sketched in London, for others more in unison with the physical features of the country. The first emigrants, however, had been obliged to follow the previous arrangements, which were found so harassing and unsatisfactory, as to induce several to abandon their allotments and leave the company's lands, and settle elsewhere.

Nevertheless, the energy and perseverance of Mr. Clifton appeared in a fair way of ultimately triumphing over all local obstacles; the substantial advantages of the site he had chosen were becoming evident, and promised solid, though not brilliant, success, when the Western Australian Company suspended operations, dismissed its officers, and practically abandoned the enterprise, since which period it has retained little more than a nominal existence.

The names of the governors and acting governors who have administered the affairs of Western Australia since its foundation, have been:—

Captain Sir J. Stirling, R.N. (governor)	1st June 1829
Captain Irwin, H.M. 63rd reg. (acting)	Sept. 1832
Captain Daniel, H.M. 21st reg. „	Sept. 1833
Captain Sir J. Stirling returned from	
England	Aug. 1834
John Hutt, Esq. (governor)	2nd Jan. 1839
Lieut.-Col. Clarke, K.B. (governor)	Feb. 1846
	Died 6th Feb. 1847
Major Irwin (acting)	7th Feb. 1847
Captain Fitzgerald, R.N. (governor)	Sept. 1849

CHAPTER II.

PHYSICAL ASPECT—COAST LINE—ISLANDS—HARBOURS—RIVERS AND LAKES—
GENERAL TOPOGRAPHY OF THE COUNTIES—GEOLOGY—MINERALOGY—
SOIL—CLIMATE—WINDS AND TIDES.

WESTERN AUSTRALIA is not marked, like the provinces of New South Wales, and of Victoria, by lofty mountain ranges, nor, like that of South Australia, by deep gulfs or bays; or distinguished by any great river, such as the Murray. Sheltered from the tremendous roll of the Southern Pacific, and laved by the more placid waters of the In-

dian Ocean, the west coast, between Sharks' and Geographe bays, presents a comparatively regular and unvaried outline; comprising, nevertheless, many estuaries or inlets, some of considerable size and depth, but barred with sandbanks at their entrance, so as to prevent their being safe harbours for large ships.

The coast-line north of Geographe bay is bounded, for a distance of thirty to forty miles from the land, by a bank of coralline

* See Mr. Clifton's Letter to Captain Stokes, published in the latter gentleman's *Discoveries in Australia*, vol. ii., p. 382. † Ibid.

or calcareous formation, such as is found on the coast of Sicily. The bank of soundings extends farthest off the north-west coast, as eighty-five miles north of Depuch island (De Witt's Land) a bottom of fine white sand was found at seventy-five fathoms. Between $19^{\circ} 50'$ and $20^{\circ} 10'$ S. lat., about forty miles from the islands fronting the coast, there are soundings of 200 fathoms. Off the south point of Sharks' bay, in $26^{\circ} 42'$ S. lat., soundings of grey sand were obtained in 137 fathoms, at thirty-seven miles distance from the land. In 32° S. lat., twenty miles off Rottnest or Garden island, the soundings are seventy fathoms.

The distinguishing feature of the colony is a somewhat elevated and occasionally steep and rocky range, termed the *Darling Hills*, which runs nearly parallel with the west coast, at a distance of about twenty miles from it, and extends from about 35° S. lat., near Point D'Entrecasteaux, along the meridian of 116° , for above 400 miles, with an average breadth of forty miles, and a height varying from 1,000 to 1,500 feet. There are collateral spurs, which, on approaching the 32^{nd} degree of latitude, appear to form extensive parallel chains, and are probably connected with more elevated mountains in the unexplored northern and north-eastern parts of Australia.

Captain Grey says that he discovered two mountain ranges; one, named *Victoria range* (see general map), at the northern extremity of the Darling range, and about thirty miles to the eastward of it, lofty and altogether differing in character from the Darling, which at this point, where its direction is nearly north and south, is called *Moresby's flat-topped range*; and another, apparently thrown off in a westerly direction from the Darling range, about forty miles in length, from north to south, of a bare, sterile, and barren nature, and terminating seaward in Mounts Peron and Lesneur. This ridge is called, after one of the most intelligent gentlemen in the Colonial Department, London, *Gairdner's range*. (See map of Western Australia.) Another ridge, north and east of the preceding, is termed *Herschell's range*; and one farther south is called *Smith's range*.

The Darling range presents the appearance of a mighty forest of magnificent timber, broken only occasionally by a few inviting valleys.

The Darling hills separate the province

into two distinct districts; the one, termed the plain of *Quartania*, situated between the Darling hills and the sea coast, stretching from south to north for about 300 miles, with a breadth of fifteen to twenty miles. This plain is well wooded towards the coast, is in some places low, of a coralline structure, and full of estuaries, lakes, rivers, and streamlets. In other places the limestone formation rises into eminences and hills, parallel to the coast-line, and nearly isolated from the surrounding country. To the northward, towards Champion bay, the country becomes more undulating, and presents some singular ridges.

The district to the eastward of the Darling range, "the country over the hills," may be said to commence at King George's Sound, on the south coast, and run north for 500 miles, over a varied territory, which in some parts has been compared to the county of Herefordshire, in England; in others, to the county Wicklow, in Ireland; and in the more northern parts, in the Toodyay district, to Switzerland. The extent of arable land in this division of the colony is very considerable; so lightly timbered as scarcely to offer any obstruction to the plough; and consists of a loamy soil, well watered, not subject to be materially affected either by heat or wet. The settled portion commences about the latitude of Perth, and extends north from 80 to 100 miles. Some settlers have, however, located themselves 100 miles farther, in a northerly direction.

Owing to the limited number of its settlers, and the serious difficulties with which they have had to contend, Western Australia has been less extensively explored than the sister colonies described in the previous pages, and the knowledge acquired of its physical features is, consequently, yet more fragmentary and imperfect; the difficulty, moreover, of framing a correct though brief general view of the topography of this extensive and really valuable province, is materially increased by the contradictory statements made by different explorers, for, as in the case of the Geraldine district, the same region has been pronounced by one party, of exceeding fertility and beauty; by another, sterile, and absolutely unfit for cultivation. After careful examination of every available source of information, I have succeeded in forming, as it were, a skeleton outline of the coast line and the country at the back, as far as it has been examined;

but the details cannot be filled in, while so much even of this portion remains imperfectly known.

The north-west coast line of Australia has been traced as far as Sharks' bay, in the general description of the island (see p. 382); and the inland features, so far as they were seen by Captain Grey, in 1838, have been also noted (p. 379).

Sharks' Bay (see map of the whole island), in 26° S. lat., is large, of easy access, and affords several safe anchorages. It was discovered by Dampier, on 6th August, 1699, and so named by him, on account of the large number of sharks seen there. A considerable portion of the land adjacent to this extensive inlet is yet unexplored; we continued unacquainted, even with the coast line, and it still seems to me probable (as I stated in my *History of the Colonies*, in 1834-5), that the outlet of a large river will ultimately be found in this neighbourhood.

Gascoigne River, nearly opposite *Bernier island* (see p. 382), and forming the south-western extremity of Sharks' bay, was partially examined by Captain Grey, in 1839: but with few men and a couple of whale-boats, it was impossible for him to determine the character of the country, the extent of the river, or the depth of an adjacent inlet. The manner in which he was preserved through the perils of shipwreck, famine, and thirst, while driven about this wild coast, was truly wonderful. Nothing, as the gallant explorer himself says, could have saved him and his party, but the ever active and present care of Divine Providence. It appears from Captain Grey's examination, that the country to the northward and southward of the Gascoigne is low, covered with mangrove flats, and abounding in sand-banks, presenting, in fact, all the features of the embouchure of a great river. Near the sea-coast is a sandy, scrubby ridge, termed *Lyell's range*, apparently thirty miles in length. The plains beyond were examined for fifteen miles in a north-east direction, and found to consist of salt, mud, and moist sand, devoid of fresh water, and seemingly illimitable, the eye being too much affected by the mirage, to perceive their actual limits.

The Dutch commodore, Vlaming, visited this part of the Australian coast in 1667, found a river, and went up it with three boats, four or five leagues, amongst rocks and shoals; saw much water inland, as if the country were drowned, but no men nor

anything fit for food, and, as was the case with our English explorer, wherever they dug for water, the ground was salt. It is supposed this river may have been the Gascoigne. Vlaming came to another river near the preceding, ascended it for about a league, found it terminated in a round basin, and was entirely salt. The country was destitute of grass and trees. The point of entrance into the river was composed of a very red sand. In the bed of the Gascoigne a fine white sand was found. The northern mouth of the Gascoigne, where entered by Captain Grey, had twelve feet on its bar at low ebb tide; the bar once passed, there are three to three-and-a-half fathoms, in a land-locked creek, which is separated from the sea by a shifting bed of sand and mangrove swamps, termed *Babbage Island*, which forms the northern and southern mouth of the Gascoigne river.

The southern mouth of the Gascoigne (lat 24° 57') is completely free from shoals, and has seven feet of water on the bar at low tide; there is also a channel in it containing never less than this depth of water for about four miles, after which it is only navigable for small boats during the dry season. Large trees (termed snags, by the Americans) are firmly planted in the bed of the river, which renders the navigation difficult, especially at high water. In one part of Captain Grey's *Journal* (vol. i. p. 384), he speaks, as before, of the "*northern* mouth of the Gascoigne having a very good passage with twelve feet of water at low ebb tide;" in another part (vol. ii. p. 120), he says, "*the northern* mouth is narrower and more *shoal* than the *southern*." The truth, however, is, as admitted by the frank and intelligent author, his examination was "hurried and imperfect," and the opinion above given must be received with caution. The vast masses of drift-wood, the large trees carried across the bay to Dorre island, the gentle slope of the country into the interior, and the immense bed of the portion of the stream seen, indicate the existence of a large river which drains probably a fine region. Plains of a rich reddish loam border the Gascoigne on each side, occasionally broken by low, gently rounded hills, composed of the same description of soil; fresh-water lagoons were found in different places, the country, even in the dry season, was covered with grass, and no termination was seen of the good land, except near the sea.

Immediately to the south of the southern mouth of the Gascoigne, a line of shoals commences at two to four miles from the coast, and runs with scarcely any intermission round the bay, so as to render the approach to this coast almost impracticable. A low spit about twelve miles south of the Gascoigne river, is termed *Point Greenough*, and between this point and the river there is a deep bay, the shores of which are low and thickly studded with mangroves, through which many salt-water creeks run up into the country. Below *Point Greenough*, the shore trends south-and-by-east, preserving its low character, but thickly wooded with mangroves for eight miles, when a remarkable change takes place, the mangroves suddenly cease, and the low range of hills which extend southward along the coast and parallel to the shore, increases a little in height. Within about the distance of a mile, the mangroves recommence, the coast trends south-east for about five miles, then runs south-east-by-east, forming a bay about four miles deep, the bottom of which appears to be lined with mangroves. After passing this bay, the coast runs south-east-and-by-south, the mangroves appear to be less numerous, and the low wooded hills approach nearer to the sea, the low shore is fringed with trees down to the water's edge, forming little green knolls of foliage. Farther south, to the *Hamelin Bay* and *Freycinet Harbour*, in the bottom of *Sharks' bay*, we know nothing certain.

Peron's Peninsula, about 200 feet high, is a barren, sandy table-land, sloping away to the southward.

Dirk Hartog's Island, when seen by Captain Grey, looked exactly like a Scottish heath. There is good shelter for shipping, and adjacent there is a guano island, and a very rich mother-o'-pearl bank.

Steep Point, the western extremity of this portion of Australia, consists of lofty inaccessible limestone cliffs, hollowed into deep caverns by the action of the waves. The coast then trends to the south-east, is very uninviting, and consists of a high range of barren limestone hills, ascending gradually from steep cliffs, which form the coast-line. The outline of these hills is monotonous; they have a barren appearance, and are rent in places by deep rocky gullies, which run down to the sea.

Red Point, the western entrance of *Gantheaume bay*, is a bold circular headland, four miles in extent. To the northward

of this promontory the country has a white sandy appearance; the coast-line consists of low ridges of sand-hills; but inland there are said to be tracts of good pastoral and arable soil, in blocks of six to ten thousand acres—much of a rich alluvial character.

Gantheaume Bay, where the monotony is broken by the appearance of detached hills, although protected at the south end by a reef, has as heavy a surf breaking on it as on any other part of the shore. An inlet here is described by Captain Grey as "one of the most romantic and picturesque estuaries he had yet seen;" its shores abounded with springs, and were bordered by native paths, whilst the trickling springs, flowering shrubs, drooping foliage of several large sorts of casuarina, the number of wild swans on its placid bosom, and the natives fishing in the distance, imparted to the whole scene a quiet and charm to which he had long been a stranger. The mouth of the inlet is protected from the ocean surf by a line of breakers and reefs. There are rich flats on each side of the estuary, which communicates with a deep valley, through which flows a stream called the *Murchison*, after the distinguished geologist of that name.

During an expedition in 1849 from Perth, the explorers found on turning to the south-west along the bed of that stream, that the right bank of the Murchison river had wide grassy flats, the stream forming large pools, some of them more than a mile in length; but with the exception of the flats on each side of the bank, the country is said to be poor and scrubby, destitute of trees, and the hills high and rocky, consisting of red sandstone, those to the west capped with limestone. It is in this neighbourhood that the enormous deposit of galena ore has been found in 1848-9. In some places the Murchison runs through almost perpendicular sandstone cliffs, 200 feet in height, broken at intervals by enormous fissures. It is not yet known whether the embouche of the estuary into which the river disembogues, is navigable from seaward; the estuary is about one-and-a-half miles long, by half-a-mile wide; the tide flows five miles up the stream, when it is obstructed by rapids, above which the river, so far as it has been traced, is a succession of long reaches of water, 100 yards wide, and extensive flats covered with reeds. The river continues from east-north-east, through a more level country, running in a deep channel 80 to 100 yards wide,

bordered by thickets of acacia and cypress. Mr. Burges, who visited the Murchison in 1848, says, "We rode up the river about seventy miles from our camp, and when we turned back the river bed was nearly as large as when we made it, but the water was quite salt." He thinks it would make a very good cattle-station, as there is plenty of summer food along the river, and plenty of winter provender on an extensive limestone range of hills which lie to the northward. There are also a number of large springs along its banks; game abounds. The Murchison is supposed to take its rise in the interior salt marshes. The Murchison valley is backed by some lofty and fantastic-looking hills, giving promise of a fertile region. A total geological change seemed to take place in this neighbourhood; a rock, heretofore unobserved in the south-west portion of Australia, occupied the principal place; with this rock limestone was associated, the springs had a strong sulphureous smell, and the lofty broken character of the distant mountains, give a grand appearance to the scenery.

The country behind Gantheaume bay, proceeding in a south-by-east direction, consists at first of ravines and scrubs, next of elevated sandy downs; thickly clothed with banksia trees; then of open sandy downs; subsequently a rich limestone region occurs, with gently sloping hills and valleys, affording even in April fair feed for sheep and cattle, with springs of water at intervals of every few hundred yards, generally situated at the edge of large clumps of trees. This description of country appears to be continuous in a south-easterly direction; on a southerly course a gravelly treeless table-land was found, in places covered with beds of clay, on which rested ponds of water, occasionally intersected by thick scrub.

According to Captain Grey, a fine fertile country, abounding in grassy valleys, rich plains, picturesque limestone ranges, running streams, and estuaries, stretches between the *Murchison* and *Hutt* rivers. It was more thickly peopled than any district previously seen; the native paths were broad and well beaten; the wells, ten to twelve feet deep, were executed in a superior manner, and the dwellings also were of superior construction. This observant traveller says, (vol. 2, p. 14), "It seemed certain that we stood in the richest province of South West Australia, and one which so differs from the other portions of it in its geological characters, in the elevations of its mountains,

which lie close to the sea coast, in the fertility of its soil, and the density of its native population, that we appeared to be moving upon another continent." This region is situated between the parallels of $27^{\circ} 30'$ and $29^{\circ} 30'$: its principal river, the *Hutt*, disembogues into a large estuary. A few miles above the estuary the river separates into two branches, both of which were found running in April, 1839. The other principal streams which drain this district are the *Buller* and the *Murchison*. The entrance of the latter was not found available in December, 1849, for a cargo boat. The valley of the Buller is divided into two equal portions by a granite ridge; the land on the left bank of the eastern branch has been found to be of "a very good grassy description, consisting of a range of granite hills, about ten miles north and south, two miles wide." Water, in pools, and abundance of grass, exists on the eastern branch; further east, high and sandy level plains, in an abrupt line of sandstone slopes and hills. The valley is estimated to contain 10,000 acres of good grassy land, and 20,000 of inferior feeding country; the good land much broken into patches by that which is of inferior quality. Timber is scarce.

The *Chapman River* runs in a sandy channel, with small shallow pools; the land on the bank of the stream is indifferent and sandy for about a mile, when it rises into sandstone and granite hills, covered with excellent grass. The land upon its northern branch is not generally good, although some fine patches are to be seen. Mr. Burges thinks there are 30,000 acres of good feeding and well-watered land on the north branch of the Chapman, and 30,000 acres on the south branch, but not so well watered.

In January, 1840, Mr. G. F. Moore, in the colonial schooner *Champion*, endeavoured, but in vain, to find a navigable entrance at the point laid down by Captain Grey as the estuary of the Hutt river. The interior, where any of it could be seen, looked grassy; but the view taken was very limited and hurried. In December, 1849, Lieutenant Helpman, in the colonial schooner *Champion*, examined a boat harbour which he had previously discovered at the south end of the Hutt estuary, and found in the channel, between the reefs, twenty-two feet water; the breadth, from the reef at the entrance to the dry sand beach, which is

very low and shelving, is about 200 yards; and in the middle, for about a quarter of a mile, there is eleven to nine feet water. The entire reef is about three-quarters of a mile long, extending in a north-west direction, about one foot above water, thus keeping the boat harbour clear, which will be found exceedingly useful for coasters drawing seven or eight feet water, or for even much larger vessels in fine weather. Plenty of fresh water is found around by digging one foot deep; fish abound, and may be easily caught from the beach. The ore of the newly-discovered rich mineral district, termed the *Geraldine*, may be shipped from this harbour, to which a good road may be made at an expense of £100.

The *Bowes streamlet*, near the Hutt, contains about 100,000 acres of good sheep country: the bed of the stream being filled with broad-leaved reeds, indicates a supply of water in the dry season. The country around exhibits a metalliferous formation. In October, the small brooks were all running strong, and the grass was then green. The hills are of gneiss, with granite and trap rock; the latter clothed with excellent grass, of various kinds.

The country south of the *Hutt* river was examined during an expedition, in 1847, by Lieutenant Irby and two enterprising gentlemen, Messrs. Gregory, of the Western Australia surveying department, who, on 20th December, crossed the *Chapman* river two or three times, and found the country, at first, scrubby, but afterwards saw several fine patches to the eastward. On a course varying north and east the country was grassy; the soil of decomposed granite; patches of scrubby country occurred, then a good grassy district of about ten miles; clumps of York gum, sandal wood, jam and black wattle, were observed on the hills. Deep grassy valleys extended in a southern direction, and the country appeared to continue good, and well watered. In the north and west, the grassy region extended for at least ten or twelve miles, presenting to view about fifty or sixty thousand acres of sheep pasture, of a fine description.

At the stream called the *Buller*, near Champion bay, the country, for a distance of five-and-twenty miles, is bounded by a lofty chain of flat-topped mountains, with so regular an outline as to appear rather the work of nature than of art. Between this range and a ridge nearer to the coast is a large and fertile valley, partially drained,

toward the sea, by another valley—in both rise gently swelling hills and picturesque peaks, wooded in the most romantic manner.

The next position of importance on the coast, and indeed the best anchorage, (excepting among the Abrolhos), between Sharks' bay and Gage roads, (at the entrance of Swan River), is termed—

Champion Bay, situated in 28° 47' S. lat., and 1° 9' 20" W. of Swan River. The roadstead is sheltered from the south-west by *Point Moore*; but a heavy surf occasionally rolls on the beach, extending from the bottom of the bay to the northward, so as to prevent boats landing, unless a jetty, of ninety feet in extent, were run out into twelve feet water. A road has been formed from the *Geraldine* mines to the bay, where a government station, with a few soldiers, has been established, for the protection of those engaged in mining operations. Public attention is now directed to this neighbourhood; and some details respecting the surrounding country, so far as is known, are necessary.

The most remarkable inland features are the *Menai hills*, a group at the north end of Moresby's flat-topped range, *Mount Fairfax*, and the *Wizard Peak*, or *Hill*, which is an almost solitary pyramidal hill, of 715 feet elevation, distant eleven miles from Champion bay. It is composed of large blocks of ironstone, which have such a powerful effect on the needle, as to change its direction, in different places, ten degrees. A few small casuarinas and wattles are thinly scattered on its summit, and some stunted xanthoreas on the south-west side. Stokes says, that part of the range lying immediately north was absolutely a mass of bare ironstone.

Mount Fairfax, 582 feet above the sea, is the southern and most elevated part of Moresby's flat-topped range. It rests on a reddish, sandy, sloping plain, occasionally scattered with fragments of quartz and ironstone, which apparently characterize the formation of Mount Fairfax, and the neighbouring heights.

The outline of *Moresby's flat-topped range*, in 28° 50' S., presents a remarkable similarity to *Sea range*, near the Victoria river, on the north-west coast, lat. 15° 20' S., and to *Cape Bedford*, on the north-east coast, lat. 15° 10' S. The drawings of these ranges given by Captain Stokes (vol. ii., p. 142), present a striking resemblance to each other, in their contour as well as elevation. The view from the summit of *Wizard peak* is

very commanding: to the north-north-west and north-east lie extensive valleys, concerning whose capabilities very different opinions have been expressed. To Captain Stokes (who viewed them through his telescope), they all appeared of a similarly arid nature. For a few miles to the eastward, and a great many to the northward, the formation of the country is considered by this authority to be of the same flat, broken, and irregular character, including no greater elevations than the Wizard peak, while to seaward, the appearance of the country was that of an undulating plain, with patches of stunted woodland, widely scattered. Mr. Bynoe, an intelligent naturalist, who accompanied Captain Stokes, conceived a like impression of the comparatively sterile nature of the country: he says, it was only the surface soil which held vegetable matter; that near the Wizard peak, the holes dug by the natives to obtain the warran, or native yam, disclosed pure sand; and that near Moresby's range, the soil became freely mixed with ironstones and pebbles—the vegetation more stunted, consisting principally of prickly bush, mingled with coarse brown grass, on which few kangaroos or emus were seen.

On the other hand, the Honourable George Fletcher Moore, who was my fellow-student at Trinity college, in days of yore, and who there distinguished himself by high attainments, and whose quiet, observant character was not likely to give expression to a hastily-conceived or exaggerated opinion, thus speaks of the country near Champion bay:—"Judging by the eye, at that distance, the entire space, as far as we had an opportunity of seeing, after going a little way back from the coast, on the slope to the hills, upon the hills, among the hills, beyond the hills, and, in short, everywhere as far as the eye could discern, appeared a grassy country, thinly sprinkled with some low trees or shrubs, perhaps acacias. If this be the case, and there be water sufficient, of which there is no reason to doubt, this may certainly turn out to be the finest district for sheep pasture that this colony can possess."

Since the foregoing was written, I have received from several quarters details of explorations and examinations of the country to the northward and eastward of Champion bay, which fully substantiate these views, as well as those expressed by Captain Grey. Mr. Gregory, also, who ascended the Wizard

Peak, in 1848, gives an idea of the country totally different from that expressed by Captain Stokes; he says, in his journal:—

"After an hour's ride over rich grassy hills, reached the foot of Wizard's peak; here we left our horses and ascended the hill; arrived at the summit, to our great surprise, instead of the scrubby and sterile country described by Captain Stokes, of the *Beagle*, beautifully grassy hills stretching from north-north-east met our view to the extent of about 20,000 acres; had it not been for certain bearings to Mount Fairfax and other hills, that we were on Wizard peak, I should have suspected its identity. Leaving Wizard peak and steering north along the western foot of the grassy range; the country to the east consists of grassy hills of limestone, rich in fossils of wood and shells, with an occasional granite hill producing coarse grass or short scrub."

The *Greenough River*, which flows into Champion bay, was examined, in 1848, by the Messrs. Gregory and Burges, and found, near the sea, bounded by white and red sandstone cliffs 200 feet in height, and generally covered with dense thickets of acacia growing on an otherwise barren and stony soil. One channel was found dry, with no appearance of water having passed over its sandy bed during the previous winter; as the river was traced upwards, in a *southerly* direction (see map), it was found to improve, and was joined by a small gully from the west coming through a grassy valley. The explorers, on altering their course to 210 degrees, found the country improve, the river running, with many large pools of water, some more than half-a-mile long, and 80 to 100 yards wide; the water from sandstone springs slightly brackish. It is estimated that there are 50,000 acres on the Greenough well grassed and watered.

The embouche of the Greenough river is a small estuary separated from the sea by a low bank of sand, thirty-five feet wide and five feet high, over which the sea, during gales, appears to enter. The banks of the Greenough are, in some places, seventy feet high, composed of limestone.

Mr. Roe, the surveyor-general of Western Australia, found, in June, 1847, to the north-east of Champion bay, a tract of about 150 miles of good arable land, one-third of which he considered excellent for every purpose, either agricultural or pastoral. He states, however, that he did not find quite so much good country as Captain Grey's book would have led him to suppose.

Proceeding southward, we arrive at *Port Grey*, which is five miles to the southward of Point Moore. The shore between is rocky, with outlying reefs. There is

an extensive reef running from Point Moore, and one to the north from Point Grey, and a centre one, leaving a clear opening on each side. The port is exposed to southerly winds, but there is "a very snug little harbour formed by the reef, extending from the land in the depth of the bay." There are two and-a-half fathoms smooth water close to the reef, and the point of this natural jetty shuts in with Point Grey, bearing south-by-east, "so that no wind could hurt." There is fresh water close to the harbour, which seems to be adapted for small coasters.

Before proceeding further with the coast line, it is advisable to examine *Houtman's Abrolhos*, distant thirty-five miles from the mainland, in $32^{\circ} 42' 50''$ * S. lat., and $1^{\circ} 57' 50''$ W. of Swan River. They form three separate groups of coralline islands and reefs, which extend in a north-north-west direction forty-eight miles, diminishing in breadth towards the north. They are termed the *Northern*, *Easter*, and *Pelsart* group, and are separated by channels four to ten miles wide.

Easter group (the central) contains a large and secure haven, termed *Good Friday harbour*, having fifteen to seventeen fathoms, fine muddy, sandy bottom, between the coral patches, which demand the utmost attention from the navigator in entering the harbour.

Rat Island, the centre of the group, has an elevation of about thirteen feet, and has low overhanging cream-coloured limestone cliffs. The soil is mixed with guano, and filled with burrows of the sooty petrel or mutton bird. The island is infested with rats, and there are numbers of a pretty lizard, whose tail is covered with spines.

The Abrolhos form the upper surface of the great coral-bank, which extends from the mainland, and shelves off at the outer edge of the south part of the group, almost precipitously to no bottom, where soundings are not found with 250 fathoms line. The average depth surrounding the islands is twenty to thirty fathoms. With the exception of the Bermudas, these coral islands, so far as we know, are the farthest distant coral formation from the equator. The reef on which Rat island rests extends off 400 yards on the inner side, and has twelve fathoms just off it on a grey sandy mud. The greater portion is composed of a variety

* This is the position of the observation spot of Captain Stokes on *Rat Island*

of corals, intermixed and forming a consolidated mass with "brain-stones" scattered over it. The reef is nearly dry at low water; but a portion does not rise so high, and projects so as to form a narrow shelf, from the edge of which a wall descends almost perpendicular to the depth of fifty-four feet. The coral on the upper twenty feet is formed in the shape of huge fans, spreading out from stout stems, overlapping each other in clusters, and having angular cavities between. The lower portion of the wall is of the common branch kind.

The *Wallabi Islands* form part of the Abrolhos group, and have a good haven, termed *Recruit harbour*, with eleven to twelve fathoms, perfectly sheltered on all sides. East Wallabi island has an elevation at the north-east extremity of fifty feet, and measures upwards of a mile each way. West Wallabi island is two miles and-a-half long, by one mile broad; in the centre is a low flat, with hills rising all round except on the south side. *Flaghill*, the highest, is formed of sand and comminated shells, while the flat which stretches to the south-west from its foot, is of limestone formation, on which there is a cavern fifteen feet deep, with a sloping entrance and a stalactite roof. Some sand hills, thirty feet high, and covered with a dense scrub, are filled with the burrows of the mutton bird. The north end of the island is a level stony flat, with patches of brushwood, among which Captain Stokes found such an abundance of the marsupial animal, termed the Wallabi, that in four hours, seventy-six, weighing about seven pounds each, were killed with three guns. It is strange how these animals reached the islets from the main. The snapper fish were numerous off the island, and so voracious that they allowed themselves to be taken with a small piece of paper for a bait.

Gun Island, in $28^{\circ} 53' 10''$ S. lat., $1^{\circ} 53' 35''$ west of Swan river, forms the north-west extreme of the Pelsart group, and is the largest of the islets (a quarter-of-a-mile long). The group is encircled by a reef; on which doubtless the Dutch ship *Zeewyk* was wrecked in 1727. The island was so named by Captain Stokes, in consequence of finding on it, 24th April, 1840, a brass four-pounder of singular construction, which is now deposited in the United Service Museum, Scotland-yard, London. The gilding on the ornamental brass-work is in a remarkable state of preservation. Two Dutch doits were found, bearing date 1707

and 1720; also a number of pipes and glass bottles; the latter of a stout Dutch build, some capable of holding five or six gallons; they were placed in rows, half buried in the sand, as if for the purpose of collecting water, and were covered with a white substance, which had eaten away the glaze.

Resuming now an examination of the coast to the south of Champion bay, it appears, for at least thirty miles, as seen from the deck of H.M.S. *Beagle*, to consist of high sand hills, partly covered with vegetation; immediately in the rear is a range rather higher and of a less barren appearance; behind these again, at a distance of eight or nine miles, there arises a series of singular table-topped broken ridges.

The *Irwin River* falls into the sea midway between Champion bay and the Arrowsmith; it rises in the interior to the eastward, and has in some places a bed eighty yards wide, with limestone and clay banks, thirty feet high; but in the dry season water is only to be found in pools. The valley of the Irwin is said to extend thirty miles north-north-west and south-south-east, and is about eight miles wide. On an east-north-east course from Champion bay, there are extensive flats of good light soil, well grassed, and some two miles wide; a beautiful country, full of warren-holes, and lightly timbered; several good pools, "one 200 yards by 25, and no bottom to be found by diving." A fine wide grassy flat, with small trees, continues to 29° 9' S. lat. Advancing thence in a north-east course, the country much improves; banks of clay and red sandstone occur; but on approaching the *Coal Valley* in 29° 57' 42" S. lat. (200 miles north of Perth) there are no flats but steep banks to the river bed, with plenty of good water by digging a few inches, and abundance of grass. The river bed twenty-five yards wide, running through sandstones and shales. The coal seam seen here was about six feet thick, and ran entirely across the bed of the river, and under the bank on both sides. The Irwin divides into two branches, where the sandstone ceases, and the granite formation commences; the largest stream flows from the eastward.

Mr. Macgill, an officer of her Majesty's 96th (who was afterwards unfortunately lost), made, in company with others, in 1847, a journey from Lefroy's station, on the *Moore* or *Garban river*, to Port Grey; he found the country (probably he kept near the coast), for the greater part of the way,

wretched and unproductive; the party were two days without water; but the Irwin valley he describes as a "terrestrial paradise," in breadth from one to six miles, and extending, at all events, from twenty-five miles inland down to the coast.

The *Arrowsmith River*, or rather brook, has its embouche in the sea, to the north of Gairdner's range, and its rise to the north-east, in the Herschel range. The pasture-lands on the Irwin join those on the Arrowsmith; the country is said to be better adapted for cattle than for sheep, as parts of it are rather low; for agriculture it would be useful, as the soil is rich, and there is scarcely a tree to each hundred acres. There are about 10,000 acres of fine rich pasture land along the banks of the Arrowsmith, reaching within two miles of the sea, which would make a superior summer run for a large herd of cattle. Ten thousand sheep could be kept between the Eastern Irwin and the Arrowsmith, but the occupiers would probably have to dig for water. Whether the river and country is identical with that named by Captain Grey, is uncertain.

The country between the Arrowsmith and *Moore river*, crossing the streamlets of Hill and Smith, behind the ranges, consist of extensive plains, which, at least, during the rainy season, are well grassed.

The *Hill* stream flows from the south end of Gairdner's range.

The *Garban* is formed by the junction of the *Moore* and *Norcott* rivers, about fifty miles north of Perth. From the *Garban* to Perth, there is a chain of fresh-water lakes, at intervals of five or six miles apart.

The coast line presents no feature of note; harbours for cargo boats probably exist at *Island Point*, *Jurien Bay*, *Lancelin Island*, and behind the reefs at and near *Bretton Bay*. The appearance of the shore is barren and forbidding, but the wind seldom blows direct on the land; vessels can therefore run north or south, according to circumstances.

Approaching the Swan-river estuary, we reach *Rottnest* (rats' nest) *Island*, distant twelve miles from the port of Fremantle; it is ten miles long by seven wide, heavily timbered, principally by the cypress, and bounded for nearly its entire circumference by limestone rocks, so as to present few landing-places for boats. This island is the prison where the aborigines of Western Australia were transported, for offences com-

mitted in the colony. From a gently rising ground near the superintendent's house, the view is enclosed on every side by a chain of hills which slope gradually down into the plain, occupied by a succession of lakes, the largest two miles in circumference, and one yielding pure salt in abundance. The aborigines, about twenty in number, under the direction of their superintendent, Mr. Vincent, and with the aid of four soldiers, have built an excellent dwelling-house, store (70 feet long), cells for prisoners, workshop, stable, &c.—all of stone; made a road, ploughed, fenced, and cultivated a considerable quantity of land, and done much useful work. This establishment is now broken up, and the island leased to Mr. Thompson. The convict aborigines are employed on the roads. The salt lake is a short distance from the house of the superintendent; it is about three-fourths of a mile in circumference, and is nearly covered with beautiful crystals of dazzling white salt, of which many tons are collected in a month. The water of this lake might, in American language, be termed a "concentrated essence of sublimated salt;" it is so intensely acrid, as to blister the tongue when tasted. Mr. Deputy Assistant-commissary Webb, who explored the island, was pleased with the scenery; the soil is of a light sandy loam; in some places there is a rich dark brown mould prized for gardens.

The *Swan River*, which originally gave its name to this colony, takes its rise about 80 miles from the coast, flows north for 100 miles under the name of the *Avon*, then joining the *Toodyay* turns west, passes through the hills for fifty miles, and disembogues into the *Perth water*, an estuary about two miles long by one broad, which communicates with the beautiful lake termed *Melville water*, seven miles long by four broad. The *Swan* flows all the year round, and sometimes renders the waters fresh in *Gage roads* during winter; together with the *Perth water*, it is navigable for boats or flat-bottomed craft, as far as the tide flows, viz., about forty miles.

The *Canning*, which flows from the south-east to *Melville water*, has a boat navigation for fifteen miles. The *Helena* falls into the *Swan* below *Guildford*.

The *Swan river* is subject, like other Australian rivers, to occasional, sudden, and tremendous floods, which inundate the corn lands in the vicinity. The early settlers, un-

aware of this fact, selected a low-lying site for their town; but the first winter, fortunately, gave them a warning to choose a more elevated and safer position.

Melville water, close to which the capital of Western Australia is situated, opens into *Freshwater bay*, and the latter into *Rocky bay*, from which the estuary continues in smaller reaches until it opens into the sea at *Gage roads*, where the town of *Fremantle* is situated. The portion of the bar from *Fremantle* to *Rocky bay*, is full of shallows, on which there are only nine to ten feet water; but the estuaries of *Rocky* and *Freshwater bays*, and of *Melville*, have sufficient depth of water for the largest ships, and would form a fine harbour, if accessible from the sea. In my *Colonial Library*, vol. iii. p. 328, published in 1836, I urged the cutting of a canal, so as to admit large vessels. The bar at *Fremantle*, which extends three-fourths of a mile, not long since was blown up, so as to admit craft of eight feet draught to reach *Perth*; and it is now proposed to cut a ship canal from *Rocky bay* to the sea, through an isthmus of soft calcareous sandstone 480 yards in breadth, with an average height of fifteen feet. If this be done, and the mouth kept free from sand, Western Australia will possess a most complete land-locked harbour.

The cliffs of the coast near *Swan river* appear covered with thousands of roots, twisted together in a reticulated manner. The same formation is observable at *Bald Head*, *King George's Sound*. Their resemblance to the stumps of a dead shrubbery is so exact, that, before touching them, it is difficult to say which is the wood and which the calcareous matter. Mr. Darwin supposes that this singular appearance has been caused by the wind heaping up calcareous sand, together with branches, roots of trees, and land shells; the whole being subsequently consolidated; and when the fibrous portion decayed, lime, washed into the cylindrical cavities by the action of rain-water, preserved the form of the wood. The decaying influence of the weather is now washing away the sandstone and softer portions of the rock, leaving the vegetative forms in their primitive state.

Gage Roads, at the entrance of *Swan river*, are formed by *Garden*, *Rottneest*, *Peel's*, and *Carnac islands*; and the anchorage is protected from the vast body of water which rolls in from the north-west by a bank, which ex-

tends out to the north-east, between Rott-nest island and the main. The anchorage is in seven or eight fathoms, on sandy mud, about a mile from the gaol at Fremantle,* bearing east by north. A quarter of a mile nearer the shore, the bottom shoals rapidly to four and three fathoms, on rocky ground slightly coated with sand. A ship rightly found—especially with Honiball's patent moveable fluke anchors—would not drag up so steep a bank; and Captain Stokes thinks that the cause of some ships being driven on shore has been owing to not selecting a proper berth, and getting too near the land, on a rocky ground; so that, when a breeze sprung up, there was no time to let go another anchor with effect.

Owen's Anchorage, the usual resort from the 1st of May to the 1st of September, is perfectly secure, and readily accessible from Gage roads.

Cockburn Sound, in $32^{\circ} 10'$ S. lat., formed between Garden island and the main land, seven miles from Fremantle, is a safe and extensive anchorage. It would contain 1,000 ships, out of mortar range either from the sea or land side, and in the hands of an enemy would be exceedingly injurious to our maritime interests, especially in the Indian Ocean. H.M.S. *Beagle* rode out two gales, of forty-eight hours' duration, here, on the 31st of March and the 11th of June. The gales commenced at north by west, and, after lasting forty-eight hours, gradually blew themselves out at west-south-west. At the anchorage there was not more sea than a boat might have endured.

Rockingham Harbour is said to be a good haven, requiring only a small breakwater, for shelter against the north-by-west winds, which are of rare occurrence. The deep water runs within a few yards of the shore, and a jetty would enable large ships to discharge their cargoes.

Warnborough Sound, three miles from north to south, and two miles and-a-half from east to west, is formed by a chain of reefs; the entrance-bar has five or six fathoms water on it.

Safety Bay, an inlet of Warnborough Sound, is about thirty miles south of Fremantle. The mouth of the inlet has a tendency to fill up with sand, which a small expense in piling would prevent. If this were done, a light-house erected, and the entrance buoyed, an Indiaman, it is

* The longitude of Scott's jetty at the Swan River is considered to be $115^{\circ} 47'$ E. of Greenwich.

said, might discharge her cargo by means of a plank to the shore.

Peel Harbour, forty-five miles south of Fremantle, has a narrow entrance. The estuary is in length about fifteen miles, by two to four miles in breadth, and eight feet deep. Inside there appears to be sufficient depth of water and space to hold many vessels.

The *Murray River*, which is navigable for sixteen miles by boats, disembogues at the centre of Peel inlet; and the *Serpentine*, *Currie*, and *Dandalup* streams flow into the broader part of the estuary. The *Dandalup* joins the *Murray*. The *Harvey* flows into the head of the inlet.

Leschenault or *Koombana Bay*, in Wellington county, eighty miles south of Swan river, ninety-eight miles from Perth by land, and 180 miles from King George's Sound, has the mouth of its inlet situated in lat. $33^{\circ} 19' 10''$ S., long. $115^{\circ} 40' 15''$ E. The bay affords shelter for large ships in four and-a-half to five fathoms, excepting from north by east to west, and by north or west-north-west winds, or for smaller vessels lying further in, round to north-west; but as the bottom is clear of rocks, and there is good holding-ground, vessels have been uninjured during the heaviest gales. *Mount William*, bearing N. $40^{\circ} 6'$ E., from near the entrance of the bay, distant thirty-three miles, and with an elevation of 1,725 feet, is the best land-mark. *Mount Leonard*, another elevation of the Darling range, bears S. $81^{\circ} 44'$ E.; distant thirteen miles; elevation, 1,270 feet.† The Leschenault inlet, or estuary, at the south-west of Koombana bay, is separated from the ocean by a narrow limestone ridge, covered with timber and vegetation, and has a well-protected entrance. The estuary is about fourteen miles long, by upwards of a mile broad; in some parts, three to six fathoms deep; affording in all places water communication, as it is full to the shore edge. There is a sand-bar, easily removable, dividing the estuary from the bay; boats drawing three to four feet water can pass it at all times. Rise of tide inconsiderable.

The *Preston* and *Collie Rivers* have their embouchure on the east side of the inlet; and the *Brunswick* falls into the *Collie*, a little above its embouchure. These rivers are running streams all the year round, skirted

† *Stokes' Voyage in H.M.S. Beagle*. Vol.ii., p.396. Roe's Chart gives the height of *Mount William* 3,600 ft.

by rich pastures, and remarkable for the beauty of the scenery around.

At Leschenault, the Darling range approaches within fourteen miles of the sea; its sharply-pencilled outline broken only by Mount Leonard and the gorge through which the Harvey river flows.

Australind is situated on the easternmost border of the Leschenault estuary. It is, beyond all comparison, the best planned town in the colony; and Mr. M. Waller Clifton deserves great credit for the ability and taste which he has manifested. A substantial bridge has been constructed over the Brunswick river, in the township: it is 160 feet long, by 10 feet wide; the span of the four chief arches is 27 feet; it is supported on five piers, of which three are in 12 to 16 feet water.

Bunburry, at the southernmost part of the bay, is beautifully situated on a small high peninsula, lined on the south by basaltic pillars. The town is on an height; all the streets cross each other at right angles; and the neighbouring country is very pretty. The harbour is secure for small craft; but large vessels lie in the roadstead, to take in long timber. On the sea shore, near Bunburry, there is a formation of pure basaltic rocks, resembling, in miniature, the celebrated Giant's Causeway in Ireland. The columns, as seen in the chasms caused by the action of the sea, are, in some places, six feet high, and beautifully shaped. The district between Bunburry and Geographe bay (Henty's Plains) is one of the richest in the province.

Geographe Bay forms a complete curve. Vasse inlet, in the south-east portion of the bay, affords shelter for small craft. There is good anchorage, protected from north-west and south-west winds, on the north-east side of *Cape Naturaliste*, (which is in $33^{\circ} 31' 45''$ S., $0^{\circ} 47' 30''$ W. of Swan river), the westernmost point of the bay. The township in Geographe bay is named Busselton, situated on the Vasse river, 130 miles south of Perth. The most conspicuous feature is a neat stone-built church, recently erected, of which a drawing was given in the *Illustrated London News* of 21st February, 1846. The nave is 40 by 20 feet; the chancel, 14 by 12 feet; the walls 16 to the line of roof; the roof is constructed of native mahogany, with principals, pur-lines, &c. Thus at a place, of which the name and position are almost unknown in the mother country, Englishmen have erected

this stately fane, almost in the heart of a wilderness.

The *Vasse River* is said to "flow through a district rich in herbage, resembling clover, and enamelled with daisies, buttercups, marigolds, and other beautiful field flowers."*

The north extreme of *Cape Naturaliste* is formed of majestic cliffs of limestone, 200 feet high, and perforated with two ranges of caverns. The outer, or great cavern, is about 50 feet wide, 45 high, and 100 feet deep. Some of the stalactites measure 15 feet. The sides and roof present an extraordinary assemblage of colours, owing to the variety of liverwort and fungi with which they are covered. From Cape Naturaliste to *Cape Hamelin* the coast lies nearly due south, marked only by the *Margaret* river, which has its mouth almost midway between the two capes. The most striking sea-coast feature is a belt of snow-white sand, of some hundred yards in width.

Cape Leeuwin, or *Landt Van de Leeuwin*, the headland so called by its discoverer, in 1622, is situated at the south-west extremity of Australia, lat. $34^{\circ} 21'$ S., long. $115^{\circ} 6'$ E.: it is tolerably elevated, of a smooth but sterile aspect, visible about thirty miles in fine weather, and defended, between south-west and south-east, by rocky islets or detached breakers, to the extent of five or six miles. It appears like an island, lying close to the main, with lower land on its north side. Soundings do not extend far off shore. Flinders found eighty-five fathoms, at nine to ten leagues south by west, and forty to sixty fathoms, at six leagues to the south of the Cape. South-west gales, with a heavy sea, are experienced off this cape. H.M.S. *Zebra* was compelled to throw her guns overboard. I was myself, on one occasion, in a constant gale for nearly three weeks, running from north to south, without being able to make any westing to double the Leeuwin. There appears to be a northerly current setting round the Cape from the westward; but an easterly current generally sets along the southern shores, towards Bass' straits. A settlement was formed to the south-east of the Leeuwin, at a small harbour towards *Augusta*. It was abandoned, on account of the alleged insecurity of the haven. The anchorage is spacious, sheltered from the usual winter winds from the north and north-west, but open to those which blow from south and south-east.

* *Western Australia*, by T. J. Buckton, Esq. p. 39. London: 1840.

The *Chapman* river, after its junction with the *Blackwood* river, flows into Augusta bay or inlet, under the designation of M'Leod creek. It is navigable for boats in a northerly, and then in a westerly direction, for twenty-five miles.

The *Blackwood* river has been traced fifty miles previous to its junction with the *Chapman*; its banks are stated to be, in many places, covered with a dense forest of enormous trees, and some of the finest land seen by Sir J. Stirling was observed in its vicinity. The country was partially examined, a few years ago, by Mr. J. C. Russell. At first, the timber was of minor growth, and as thick as usual: after advancing four miles, the country improved; the "face of nature became more and more pleasing; the soil a rich red loam." On a southerly course the country deteriorated; but, on bearing west, the explorer "came upon a brook, surrounded with magnificent gum trees, the scenery very beautiful, with banks sloping down to the water." Much of the country seen was "exceedingly fertile, but greatly encumbered with timber of stupendous size." There were some grassy plains, and the region is well watered.

Proceeding eastward from Cape Leeuwin the coast trends to the north-east, and forms an open roadstead termed *Flinders' Bay*, which curves south forty-three, east thirty-seven miles, along a low, sandy, uninhabited shore to *Point D'Entrecasteaux*, a remarkable cape in $34^{\circ} 52'$ S. lat., $116^{\circ} 1'$ E. long, visible thirty miles from the deck of a ship. The next prominent point, *Cape Chatham*, is a steep rocky island, lying a mile from a cliffy projection on the main, lat. $35^{\circ} 2\frac{1}{2}'$ S., long. $116^{\circ} 29'$ E.

Point Nuyts, seven miles east by south from Cape Chatham, is a cliffy head, projecting three miles beyond the line of coast.

It is known that *Nornalup* and the *Deep River District* possess a very fine country; timber of the most stupendous size, and of the best quality, is found in this neighbourhood. A seven ton vessel was built of one piece of thirty feet, cut off the butt of a tree of 150 feet high before branching.

This region is not sufficiently known to enable me to give any description of it; it appears, however, very probable, from what I saw of the coast-line, that a good country, with certainly a fine climate, will be found in the interior; the shore abounds in inlets capable of being made valuable. *Irwin Inlet*, *William's Bay*, and *Torbay*, possibly possess

good havens. *Mariet Lake*, near Ratcliffe bay, is a large sheet of water. The whole of this coast and country ought to be carefully surveyed and explored.

King George's Sound, the best harbour in Western Australia, is formed on the south side by *Bald Head*, and defended at its entrance by *Breaksea*, *Michaelmas*, and other islands, which protect the sound from easterly winds. There are two havens called *Princess Royal* and *Oyster harbours*, the former adapted for large ships, the latter for vessels not drawing more than eleven feet of water, which may be secured within 100 yards of the shore. For a ship only wanting water and fuel there is a sandy bay in the south-west corner of the sound, where two or three streams of excellent water run into the sea over the land.

Bald Head, which forms the south-west portion of the sound, is a barren rock of moderate elevation, about two miles and-a-half in length; it is connected with the main by a low piece of land, in the centre of which stands a small peak; this gives the head from the offing to the southward the appearance of an island. The conspicuous headland, called *Peaked Hill*, with a peculiar profile outline, is about five miles to the south-west of Bald Head, whose south end is in $34^{\circ} 55'$ S. lat., $118^{\circ} 29'$ E. long.

From the anchorage of *Princess Royal harbour*, situated at the back or west part of King George's sound, *Mount Clarence* bears north-north-east, and the south end of *Michaelmas Island* just open off *Point Possession*. Stokes says that the entrance to this great basin is by a narrow channel in the north-east corner; the chief impediment being a long spit extending off the inner west entrance; it was worked through by H.M.S. *Beagle* both ways; inside there is water sufficient for a line-of-battle ship, but only for a limited space, a short distance within the entrance towards the north-west corner of the harbour, where a straggling village points out the township of *Albany*. Mount Clarence and Melville rear their bare and granitic heads on either side, and huge fantastically-shaped boulders are strewn over their slopes.

The *Kalgan*, or *French River*, which disembogues into *Oyster harbour*, flows north from the *Stirling range*, is of considerable length, and fed by many tributaries. Excursions were made up the stream in 1831 by Dr. Collie and Lieutenant Dale, who for the first twenty miles of their route found dense forests of "mahogany," white gum

trees, casuarinas, banksias, wattles, (always indicating in Western Australia a good soil,) and other shrubs; ascending the stream the country became more open, and numerous ponds of brackish water were found.

About thirty-five miles north-west from King George's Sound, there is a fine country, resembling in its park-like features the neighbourhood of Melbourne, Port Phillip. There is an abundance of kangaroos, which indicates the pastoral character of the neighbourhood.

The *Hay river*, at two miles above Ungerup, is a small tortuous rivulet, with rich grassy banks, overhung by fine shady trees. The valley is narrow, sloping gently upon either side, and its soil is a fertile mould. Lady Spencer (whose husband was, for some time, Government Resident at King George's Sound), has some fine farms in this region. The crops of grain produced here are equal in quantity and quality to those of the most favoured districts in Van Diemen's island.

The district of King George's Sound is not subject to droughts, the harbour is almost unrivalled, and the adjacent seas, bays, and inlets abound with whales and excellent fish of various kinds.

Albany, which is still a mere village, is distant from Perth by land 300 miles, and by sea 450 miles; from Adelaide, South Australia, 1,400 miles; from Melbourne, Victoria, 1,800 miles; from Van Diemen's island, 1,850; and from Sydney, New South Wales, 2,700 miles.

The coast trends to the north-east from King George's Sound, and presents several bays and inlets; the principal, *Doubtful Island Bay*, is formed on the south side by *Point Hood* and the Doubtful islands; it is about six leagues across to the north shore, and about ten miles deep, affording shelter in its south-west part from all winds that do not blow hard between north-north-east and east. The north and west shores have not been closely examined; the coal seam, which extends in a southerly direction from the Irwin river, Champion bay, is supposed to be continued to this bay, as coal is found cropping out near the water's edge.

From Doubtful Island Bay the coast becomes low and sandy; trending in an easterly direction to the maritime portion of the province of South Australia. Mr. Eyre, during his adventurous and disastrous journey from the head of the Great Australian Bight to King George's Sound, found the country improve as he proceeded through

the territories of Western Australia; tracts of better soil, and water-courses appearing to have an outlet to the ocean, rendered the country one of great interest, but the reduced and worn-out condition of himself and his horses, prevented his examining satisfactorily the character of the region he was traversing; he was therefore unable to determine whether the rivers (which appeared to have but a short course) had or had not their embouchure open to the sea.

COUNTIES.—Having completed so far as is practicable an examination of the coast-line of Western Australia, its havens, inlets, and rivers, I proceed to shew the leading features of the counties into which it is divided, whose names, position, and relative area are indicated on the map.

From the smallness of the population, Western Australia has been, as I have before stated, far less extensively surveyed and explored than the sister colonies; it is, therefore, not possible to give a detailed description of the counties which it comprises, the larger portion of which are still unsettled.

Perth County, which contains *Perth*, the capital of the province, and *Fremantle*, the principal sea-port, may be considered as exemplifying the general character of the sea-coast, counties of Melbourne, Twiss, Murray, and Wellington. The Darling range rises abruptly from the plain of Quarta, about twenty miles inland, and consists of rugged round-topped hills of rock and gravel, with valleys of a rather better quality, occasionally affording favourable spots for culture. The whole is extensively covered by an eucalyptus forest of good timber, adapted either for the construction of ships and other buildings, or for domestic purposes. The Swan and other streams by which Perth county is irrigated, have been before mentioned, beside which there are numerous fresh-water lakes and swamps, the soil on whose banks is of great richness. Several of these having been drained and cultivated, produce luxuriant crops of fruits and vegetables, maize, &c.

Generally speaking, however, the aspect of this county is discouraging to the farmer. On arriving the prospect from the sea naturally gives rise to the exclamation—"Sand! sand! is there nothing but sand?" Little evidence of active life or prosperous industry greets the anxious eye of the immigrant, save in the towns of Fremantle and Perth, and the craft on the river. For twelve miles inland he does not see a farm.

Looking back from the top of Greenmount (the first hill of the range on the road to York) the eye wanders over an apparently unbroken forest plain, the great height of the trees effectually concealing all signs of farms or houses. The first view of Perth is however singularly pleasing. Situated about eleven miles from the sea-coast, on the bank of the pretty sheet of water (formed by the Swan river) which bears its name; with the wooded shores opposite; the forest plain stretches away to the east; and the "range" rises in the distance; while the air, although so clear as to render the very stems on the trees distinctly perceptible, has yet all the charm of the soft haze, the many tinted lights and shades of a semi-tropical climate.

Gazing on this tranquil panorama from the top of Mount Eliza, the English immigrant views with surprise in the gardens lying between the cliff and the estuary, the banana, peach, nectarine, apple, and pear, the lemon, orange, guava, loquat, and pomegranate, the almond, fig, and mulberry, while the melon and its fellows creep among their stems; but yet more pleasing is the effect of the endless interlacing of trellised vines beneath which the people are pursuing their avocations, and the successive terraces of vines and olives, rising almost to his feet; yet the question, Where are the farms? still remains unanswered.

A resident of several years' standing assures me that men frequently visit the colony, who having seen nothing beyond this, leave it with a very false impression, forgetting how unfair it is to judge by one limited tract, of the whole of so extensive a territory as Western Australia. In this county the farms are almost wholly confined to the banks of the rivers and lakes.

The position of Perth is well chosen, not only on account of its beauty, but for the more solid advantages which it possesses. The sandy soil, united to an unlimited supply of good water, procured at an average depth of fifteen feet, a perfect drainage in each direction, exposure to the healthful sea-breeze sweeping up the succession of picturesque estuaries, with a frontage and rear of garden-grounds, offer great promise of salubrity, while an abundance of brick-clay, lime, fire-wood, and timber of good quality have afforded the materials for a substantial style of building. Nor have these facilities been unavailed of by the

settlers. Up to the year 1838, we learn from the journal of the Agricultural and Horticultural Society of Western Australia that the value of the improvements in Perth were estimated at £50,000, since which time the increase has been considerable. The building allotments have likewise materially augmented in value; fifteen years ago they were often bought and sold for a bottle of grog, now many are worth from £500 to £1,000; it must, however, be remembered that *then* high and tough gurr trees covered the site of the city, and from the thickness of the "bush" it was dangerous to move about even for a short distance;—*now* there is a regular town, excellent houses of brick and stone, with large verandahs and neat gardens around; a store which cost £3,000—temples of worship for different denominations of Christians, a Government-house, Court-house, Western Australian bank, barracks, gaol, club-house, hospital, magazine, public offices, hotels, inns, mills, fields, gardens, good roads, farms and homesteads in various directions.

The military barracks at Perth occupy a pretty situation, about 400 yards from the river Swan (here nearly a mile wide), and at the head of the government square, which slopes gently towards the water. From the barracks there is an uninterrupted view of Melville water for a distance of six miles, and the beauty of the scenery is much enhanced by the many strips of land which run out from the shore, on either side. On the left bank of the river, separating Perth from Melville water, is a long tongue of land, with a windmill, and on the opposite shore of the narrow passage, Mount Eliza raises its rugged and precipitous sides, which are studded here and there with white-walled cottages, peeping out from the foliage of the casuarina and banksia.*

Fremantle, the sea-port of Perth, distant about fourteen miles by water, and eleven by land, lies immediately behind the little promontory of "Arthur's Head." It is built entirely of white limestone, and the dazzling glare of the walls and houses is, in summer time, rather trying to visitors. It contains a very pretty church, a Wesleyan meeting-house, government store-houses, two good hotels, and some commodious dwellings. During the winter season, bay whaling is actively carried on; and one of

D.A.C.G., published in an admirable miscellany termed the *Swan River News*.

* From interesting sketches entitled *Our Western Australian Home*, by George J. Webb, Esq.,

the most spirited undertakings in the colony is the tunnel, made through Arthur's Head, from the principal street in Fremantle to the whaling jetty. The inland face of the cliff, at the mouth of this tunnel, is cut and finished like a fortification, and being surmounted by the stone gaol and court-house, has a striking effect. The whaling company's storehouses, &c., are partly cut out of the rock, and their ranges of furnaces and try-pots, together with the long sharp boats, suspended over the sea, ready for instant action, with oars, harpoons, baskets of coiled line, lances, and muffled rollocks, convey an idea of energy and activity fully sustained by the character of the Fremantle resident whaling parties. The jetty is built of the "Jarrah" timber of the country, which defies even the sea-worm. Its piles and beams, sunk above fifteen years ago, are as sound as the day they were put down.

Another town, or rather scattered hamlet, in Perth county, named *Guildford*, is advantageously situated at the confluence of the Swan and Helena rivers, about seven miles north-east from Perth, and four miles from the foot of the Darling range. It stands upon the high part of the alluvial flat fringing the river, which extends from half a mile to one mile from it on either side. This flat is so rich, that Captain Stokes states it produced, in 1843, after thirteen years of successive cropping, without manuring, a more abundant harvest than it had done at first. This officer notices, also, that in the year 1833 (a period when the settlers were in want of food), a flight of strange birds, resembling the rail, but larger, appeared in vast numbers near Guildford, when the corn was green: they were so tame, as to be easily taken by the hand; they disappeared in the same mysterious manner as they had arrived, and have not since been seen. There are no stock-farms, properly so called, in this district, and the tillage farms are generally small.

Monger's Lake is situated in a flat, barren tract, about three miles from Perth, and when filled, during the wet season (June), occupies an extent of five miles. There is another lake contiguous. Summer gardens have been formed by the settlers on the borders of these lakes, which yield plentiful crops of melons, carrots, potatoes, and other vegetables. The scenery around, when the beds of the lakes are dry, is very dreary; but in June, the margin of the water is exquisitely carpeted with flowers.

The remarkable stalagmitic caves of Maidin, lie about thirty-five miles in a north-north-west direction from Perth, the route being along a chain of beautiful lakes situated from four to six miles behind the sea coast, whose fertile banks afford luxuriant feed for live stock. These caves have been partially explored by Mr. Roe and Mr. Webb, and are somewhat similar to the caves near Bathurst, and in Wellington valley, New South Wales (see pp. 398-9 and 472). Six of the Maidin caves examined by Mr. Roe, presented a magnificent appearance; a narrow passage of a few yards expanded suddenly into open extensive chambers, which were traversed to the distance of 180 feet, and found to have an average width of forty-five feet, and a roof of twelve to fifteen feet, thickly studded with beautiful stalactites, some descending to the floor and forming pillars of ten to twelve feet in circumference, for the support of the roof. The floor was covered with layers of smooth, white, and semi-transparent stalagmite. Another chamber, eighty feet long by thirty feet wide, had stalactites of all shapes and sizes suspended from the roof. The cavernous entrances are in some picturesque rocky glens near Mambibby lake. The aborigines consider these recesses the abode of evil spirits.

Murray county differs from Perth chiefly in having hardly any lakes, except large swamps on the Serpentine river, fewer rich flats, and more clay upland. It has a few town sites, but no town; the church and barracks at Pingarro are very prettily situated, and will form a nucleus for a thriving village. The main streams are the *Murray*, *Dandalup*, *Serpentine*, and *Harvey*. The chief stock of this district are horned cattle and pigs, and its principal produce wheat of fine quality. The farms are generally so well fenced, as to admit of the practice which prevails there, of turning pigs loose in the forest till wanted, and whole herds of these animals wander about at will.

This county, like Perth, includes a portion of the great forest of the Darling range, and is, like it, covered with wood, even on the plain, which is however more hilly and undulating; but the valleys along the range are finer, and abound in permanent rills, and even waterfalls of much beauty, which will eventually prove useful for mills.

Wellington County bears the same general character, but is sufficiently south to render the difference of climate perceptible. In

some parts the grass remains green and the rivers run all the year. It may be considered the finest district outside the range, and offers many inducements to the emigrant. It contains several town sites, but only the seaport of *Bunburry* (see coastline) is inhabited. The *Harvey*, *Brunswick*, *Collie*, *Preston*, and *Capel*, are fine streams, with much rich land on their banks. All kinds of stock thrive well.

It is probable that this district will become the first scene of operations of the Western Australian Timber Company, now in process of establishment, as the naval timber comes down nearer to the port here than anywhere else on the west coast, and some fine cargoes have already been shipped from Bunburry.

Sussex County exhibits, as its leading and distinctive features,—extensive low flats of brown loam, swampy country, open downs, and dense forests; the whole fitted rather for English than Mediterranean produce, and for horned cattle and horses rather than sheep. The chief settlement is on the Vasse inlet, in Geographe bay. This bay affords sufficiently secure anchorage, and whalers resort here constantly for fresh meat, water, potatoes, and other vegetables, butter, cheese, &c., all which are produced abundantly and of the finest possible quality. The cheese of this district is celebrated. It consists of two kinds, one resembling Stilton, the other Cheddar. The potatoes are the finest in the colony; and its butter finds ready market even in Perth.

There is no other town in this county, except that at Augusta; but there is much fine country. Proceeding along the south coast, we come to the

Lanark and Stirling Counties.—These do not possess any settlements; though they have, no doubt, especially the latter, abundant sites for farms, and are intersected by numerous rivers and estuaries, some of which might easily be converted into harbours. The timber is the largest in the colony; and its stupendous size may be imagined from the fact, that a seven-ton vessel was entirely built out of the material furnished by a single junk, of thirty feet length, cut off one end of a tree. It often runs 150 feet in height, before it divides into branches. The timber is of excellent quality for building purposes, especially for ships. Stirling county has fine timber and good land.

Plantagenet County contains King George's Sound harbour, and the town of *Albany*.

The soil is generally of inferior description, although there are several fine farms. The town of *Albany* is handsomely situated, on a high ground, overlooking Princess Royal harbour, with two bold and picturesque granite hills, Mounts Melville and Clarence, on its right and left. The climate of *Albany* is by many preferred, as being cooler than Perth; but is liable to high winds, and comparatively less fitted for Mediterranean produce, &c. The scenery in the neighbourhood is in many places beautiful.

Among the detached mountain masses in this part of Australia are the Toolbrunup hills, of which the most eastern height, Koykyunarup, attains an elevation of 3,500 feet. It is ninety miles north of King George's Sound, and seventy miles from Leschenault, and there is a valuable agricultural and grazing country around.

Kent County is the last settled portion of Western Australia to the south-east; and it only claims that title by virtue of a few stations near Cape Riche. It is not much known, but contains some fine country, and will derive future importance from the fact, that the great Western Australian coal formation crops out in seams within a short distance of the harbour of Doubtful Island Bay, where there is also a fine district of country.

Hay, Goderich, Peel, Wicklow, Minto, and Grantham Counties, as we proceed northward, are uninhabited by Europeans; they contain all varieties of soils; and are generally hilly, intersected by streams and rivers, and well timbered; they include the eastern portion of the Darling range, and bear a considerable similarity to

York County, the first settled district "over the hills." This, with the adjoining county of Victoria, long formed the chief stock districts, but the settlers have lately penetrated above 200 miles northward. These two countries are still, however, of chief importance, both for agriculture and pasturage. In appearance they are very unlike the plain of Quartania or Darling range, presenting a continually undulating surface, sometimes almost mountainous, always wooded, but seldom so as to obstruct the plough. The best farms are generally on the rivers Avon and Toodyay; but this is not on account of the soil, which is as good in the back lands, and often on the tops of the hills; but on account of the surface water. The soils are chiefly red and brown loams; sand is rare. The country abounds with building stone; but lime has not been found, unless

in a few places. The farmhouses are generally built of stone and clay, or rammed earth, and are often very well constructed; they have all verandahs, and are not unlike the Indian "bungalows."

Victoria County much exceeds York in quality of soil, in beauty of scenery, and, indeed, in all respects. The Toodyay valley contains noble farms, both for stock and tillage.

From these districts northward, the settlements are more of the squatting character, with the exception of the rich Gingin agricultural district, on the borders of Perth and Twiss counties, and the Moore river farms in Melbourne county. On the latter is a settlement of Spanish Benedictine monks, with a bishop, who carry on farming, pastoral, and vineyard operations, for the purpose, as they state, of civilising the aborigines.

The eastern counties of Howick, Beaufort, Lansdowne, Durham, Carnarvon, Grey, &c., are little traversed or known, and are not likely to be settled so long as good lands remain open for that purpose nearer the coast.

It appears that up to the year 1847, the lands granted and purchased in fee-simple in Western Australia amounted to 1,319,973 acres, and the lands sold, to 8,925 acres = 1,328,899 acres. The estimated number of acres that remained ungranted in 1848, was 19,201,274. There is, therefore, abundant space for the extension of a white population; and even after making all due allowance for exaggerated estimates, the available land discovered in the neighbourhood of Champion bay would support a very large number of inhabitants.

GEOLOGY.—Along the coast-line of Western Australia there is a continuous bed of limestone, covered in many places by sand dunes. The table-land of the Darling range consists of sienitic granite; to the north, near the Murchison and Irwin rivers, is an elevated tract of new red sandstone.

Throughout the greater part of Western Australia there is an absence or scantiness of the *secondary* or transition rocks; all the *tertiary* appear to be of the newest kind, and to lie in juxta-position with the primary.* On the east side of the Darling range, close to the base, are several groups of isolated conical hills, about a mile apart, bearing on their summits strong marks of ignition, and extending from the William

river to the Toodyay district. Further east, the country passes into sandy plains, intersected by water-courses, somewhat similar to those on the western side of the range. On the mountains, as well as on the plains, pebbles are to be met with in patches, containing magnetic iron.

Mr. J. W. Gregory is of opinion, *first*, that the Darling range possesses no true anticlinal axis, but is a sudden break and descent from the table-land of the interior to the plain of Quartania, which will account for the non-appearance of the silurian system, and the very narrow belt of chlorite and clay-slates; *secondly*, that the Darling range attained nearly its present elevation (that is compared with the other strata, but not with regard to the actual sea level) before the period of the coal formation; *thirdly*, that the range formed the sea-coast during the deposition of coal, and its accompanying shales, appears probable from the beds of marine shells interstratified with them; that after this period the whole country was immersed, while the new red sandstone was deposited, as this formation extends over all the known portion of Western Australia, after which the whole of the present land was upheaved, and without great violence, as this sandstone is remarkable for the horizontal position of its upper strata, and it has not since been submerged, with the exception of the present line of coast where a narrow belt of limestone hills, containing shells of existing species, and the water-worn boulders on the western coast of Sussex, indicate a more recent change of elevation than that which upheaved the new red sandstone above the influence of the sea. Mr. Gregory thinks it is also remarkable that the absence of intermediate strata between the older slates and the carboniferous system, and also between the new red sandstone and the tertiary rocks, has been observed on the eastern coast of Australia, and in similar parallels of latitude.

MINERALOGY.—The geological characteristics, and the position, of the mountain ranges, indicate a rich mineral country, and recently copper, silver, lead, and coal, have been found, of an excellent quality, in the newly explored region in the vicinity of Champion bay. Iron also abounds.

The mines explored on the Canning river are curious; they all begin with lead, copper, zinc, and iron, mixed, but as the shaft is sunk, the zinc predominates; in one (the fifty acre) section, there is a regular lode of

* Mr. Bynoe, surgeon to H.M.S. *Beagle*.

zinc yielding (66 lbs. 11 oz.)* sixty-six per cent. on assay. The Matrix is a quartz lode about two feet wide, and full of bits of ore, sixty-six per cent. of zinc. The country is soft granite, and is expected to pass into slate. The galena or sulphuret of lead ore discovered recently near the Murchison river, when analyzed (22nd May, 1849) by Sir H. T. De la Beche, at the Museum of Practical Geology, in London, at the request of Earl Grey, was found to contain sixty-five per cent. of lead, and pronounced to be "therefore a good ore, and if found in abundance, very valuable to the colony."

The coal bed discovered by the Messrs. Gregory on the Irwin river, 210 miles north of Fremantle, and forty miles from the sea, is in two seams in the following order of stratification:—red sandstone, black shale, white clay, coal five feet thick; red sandstone, black shale, white clay, coal six feet thick; the strata then deepened, and the next coal seam was hidden. The first 100 feet of depth consisted of coarse red sandstone. The coal burns well, blazes brightly, and consumes to a white ash. It is supposed that the coal bed continues in a south-east direction to the southern coast of Australia, near Doubtful Island bay, where coal has been found cropping out close to the coast.

SOIL.—Very various; there are many extensive wastes, but there are also numerous rich alluvial flats, and the limestone and coralline sandy strata on the Quartania plains, when trenched, yields good crops, especially of Mediterranean produce. The vine, olive, and tobacco thrive luxuriantly; the silk-worm might also be extensively reared, as the mulberry is well suited to the soil and climate.

The geological formation of Western Australia renders it as easy to get water there by sinking Artesian wells at a depth of fifty feet, as it would be in Europe at five hundred feet. Dr. Van Sommer calculates that by a fortnight's boring two men with an engine could obtain a supply of water sufficient for the irrigation of 500 acres.

CLIMATE, dry and warm, near Perth; and of acknowledged salubrity. Along the south coast the temperature is much lower, and there is more rain. Western Australia is not subject to the droughts which prevail

on the east coast; it is open also to the influence of the monsoons, and the annual fall of rain is greater than in some parts of England. The hot winds blow from six to twelve days in the season. The mean of the thermometer at 9 A.M. is 60° to 62°; at 3 P.M. 68° to 70°. *Winter*—9 A.M. 52°; 3 P.M. 59°. *Summer*—9 A.M. 69½°; 3 P.M. 80°. The summer commences about the middle of November and continues to the middle or end of April. December, January, February, and March are the hottest months in the year; but in the warmest weather labourers may work all day in the open air, with no more inconvenience than on a summer's day in England. The adaptation of the climate for an European population is shown by the state of the ages and number of the inhabitants.

In October, 1848, the census returns showed, that out of 4,622 inhabitants, there were, under three years of age, males, 267; females, 244; from three to fourteen years, males, 606; females, 605; from fourteen to sixty years, males, 1,820; females, 913; beyond sixty years of age, males, 30; females, 17.

The abstract of the census of 1848, which I have received, does not show the proportion of births to deaths, nor of males to females born: but in two preceding years, the relative proportions were—

Year.		Births.	Deaths.	Difference
1842-3	Females . . .	85	9	77
	Males . . .	83	32	51
1843-4	Females . . .	107	16	91
	Males . . .	86	37	49

Preponderance of female over male births, in two years, was 23. The net increase of female births over deaths was 167, and of males, 100. This confirms an observation made in a previous part of this work—that in a salubrious climate, fertile soil, with sufficiency of food and comfort, and among a free people, it appears to be a fixed law of population that the female shall predominate over the male births.

The colonial surgeon, Mr. Ferguson, gives the following comparative statement of deaths among 1,000 people, in several places:—Western Australia, 12; New South Wales and Van Diemen's Island, 15; Cape of Good Hope, 16; Nova Scotia and New Brunswick, 18; East and West Canada, 20; Gibraltar, 22; Ionian Islands, 28; Mauritius, 30; St. Helena, 35.

* The best English zinc ores, those of Allowhead, in Northumberland, contain no more than 58 lbs. 13 oz. in the 100 lbs.

ZOOLOGY.—The native animals of Western Australia do not comprise all those contained in the island-continent, which are few in number, and very peculiar in kind. Of all the known mammalia, but fifty-eight species, or about the one-seventeenth part of the whole, belong originally to this region; and of these, more than one-half are of the *marsupial* order. Of Cuvier's order of *carnivora*, if we except the marine mammals of the seal genus (*phoca*), the dingo, or native dog, is the sole representative, and the important orders of *quadrumana*, *pachydermata*, and *ruminantia*, appear to be without any land representatives in this large portion of the globe. Of the *edentata*, the genera *echidna*, and *ornithorhynchus*, are destitute of teats, and do not suckle their young. The former genus (*echidna*), consists of two species of porcupines, one entirely covered with thick spines, the other clothed with hair, in which the spines are half hidden. The *ornithorhynchi* consist also of two species—*O. rufus* and *O. fuscus*. These creatures unite with the body, the fur, and habits of a mole, the webbed foot and bill of a duck; are ovoviviparous, and have the internal formation of a reptile. They are very shy, and lead a burrowing life in the mud of rivers and swamps.

Of the *rodentia*, two species belong to the sub-genus *hydromys*, and consist of creatures that seem to unite some of the peculiarities of the dormouse, rat, and beaver. A new genus of *rodentia*, discovered by Mitchell, and called by him the flat-tailed rat, is remarkable for the enormous nest of branches and boughs, which it builds so strongly, as to be proof against the attacks of the dingo, or native dog. The rabbit rat, which climbs trees like the opossum, is described by Mitchell, as having feet resembling those of a pig, the marsupial opening downwards, instead of upwards, as in the kangaroo, and about the size of a rabbit, but without a tail. Two species of mice (both peculiar), and the *dipus Mitchellii*, Australian jerboa, are included in the list of *rodentia*, and the *mymecobius rufus*, or red shrew-mouse, is sometimes considered as belonging to that order. With these few exceptions, the whole of the Australian mammalia are of the *marsupial* order, of which there are many species; the only character common among them being what has been termed the premature production of their young; for even in the few kinds of *marsupialia* not possessed of pouches,

the young hang to the *mammæ* of the mother for a considerable time. The most numerous and important are the several varieties of the well-known kangaroo (*macropus*), one species of which (*macropus unguifer*), has the singular appendage of a nail, like that on the little finger of a man, attached to its tail: the others are the different species of opossums, bandicoot, or pouched badger, a sort of sloth (*phascolarctos*), the wombat (*phascolomys*), an animal about the size of a badger, and very slow in its movements, and the kangaroo rat (*pataroo*), a diminutive kangaroo.

ORNITHOLOGY.—The list of Australian birds present but two orders, wholly peculiar, namely, the *syndactyles*, of which the most beautiful are "the sacred kingfisher," the variegated bee-eater, the charming little trochilus, or humming-bird, and the *scansores*, consisting of parrots, parroquets, cockatoos, &c., which are very numerous, and adorned with every variety of gorgeous plumage. Among the order *accipitres*, is a species of vulture, so fierce, that when pressed by hunger, he has been known to attack the natives themselves. The white eagle is also a very rapacious bird. The cream-bellied falcon, the orange-speckled, and the milk-white hawk, are common varieties; the last especially makes great havoc among the poultry. Of the owls, the most numerous is the bird called the cuckoo by the colonists, and "buck-buck" by the natives, from the cry which it reiterates during the winter nights. The order *dentirostres* includes a beautiful bird, having the habits of the red-breast; several varieties of the thrush, one of which has obtained the soubriquet of the *laughing jackass*; a description of field lark, and the wattle bird, which utters a chattering note; swallows and goat-suckers, of the order *fissirostres*, are numerous.

Conirostres.—There are several magpies and crows of this order, and beautiful birds of paradise, but the latter, like the various species of *epimachi*, are confined to northern Australia.

Gallinæ.—Pheasants, quails, and pigeons are in considerable numbers, of the latter the most remarkable variety is the *bronze-winged*. *Grallæ*.—The cassowary or emu is found in nearly all parts of Australia. It is a very wild creature, and runs more swiftly than an English greyhound. The eggs are of an elongated form, and of a green colour; the flesh though coarse is eatable, especially that of the young. Australia has also some species of bustard, curlew ibis,—some of a

glassy rifle-green; herons, avasets, rails, snipes, spoonbills, &c.

Palmipedes.—The black swan is found here. Gannets or boobies are numerous, especially on the north coast, where penquins, petrels, and ducks also abound. The *cereopsis* somewhat resembles the goose.* Vampires of a large size are numerous.

REPTILIA.—The reptiles of Australia consist of two or three genera of turtles; as many varieties of alligators, a considerable number of lizards and serpents, both venomous and harmless. The great *lacertæ*, as alligators, &c., do not appear to have been found in Western Australia. The land-lizard, and the crimson-sided snake (*Coluberporphyriacus*), are of extraordinary beauty. Serpents, also, of different species, have been seen floating upon the water, in chase of the curious ponquin. Frogs are numerous. A variety of lizard (the *chlamydosaurus Kingii*) is remarkable for a *frill* behind the head and above the shoulders.

[*Note*.—Recent geographical and other discoveries in Supplement.]

INSECTA.—The insects are very numerous, and many of the butterflies, moths, and beetles, are brilliant and beautiful. Locusts abound in the hottest season. In swampy places mosquitoes are extremely troublesome, but they are scarcely known in the upper lands. Scorpions and centipedes are found among dead wood. Wild bees swarm in many places, depositing their delicious honey in the hollow trees. Flies, especially the blow-fly (*musca carnivora*) are numerous in some districts. The gum-grub, an insect about four inches long, is esteemed by the natives a great dainty, and there are various species of ants in Australia, some of which are provided with wings. Ant hills have been found measuring thirteen feet in height, and seven at the base, tapering gradually to the summit.

Botany.—The vegetation of Australia has been frequently alluded to, and will be more fully dwelt on in describing that of Van Diemen's Island, which it closely resembles.

CHAPTER III.

POPULATION, EUROPEAN AND ABORIGINAL—LAND IN CULTIVATION—LIVE STOCK—LOCAL RECEIPTS AND EXPENDITURE—PARLIAMENTARY GRANTS—VALUE OF COMMERCE—SHIPPING—STAPLE PRODUCTS—TARIFF OF DUTIES—ITEMS OF TAXATION—GOVERNMENT—RELIGION—EDUCATION—CRIME—THE PRESS—PRICES OF PRODUCE—COLONIZATION ASSURANCE COMPANY—TRANSPORTATION TO WESTERN AUSTRALIA. SUMMARY—STATISTICS OF FOUR COLONIES IN AUSTRALIA.

THE disastrous state of affairs at the early formation of the colony, precluded the collection of statistical returns, and it is only within the last few years, that any complete Blue Books have been received at the colonial office. By an examination of various statements and authorities, I have endeavoured to frame the following connected view of the state of the colony from 1834 to 1848, in its different aspects of population, cultivation, farming stock, revenue, and expenditure, commerce, shipping,

* The habits of the Australian birds are most peculiar; one, commonly called the *bower bird*, builds for itself a kind of roofed and sheltered pleasure-ground (see Gould's *Australian Birds*); another, the *megapodius tumulus*, constructs a nest in the form of an irregular truncated cone on an oblong base, one of which Captain Stokes found to measure 150 feet in circumference; the slope of its sides being from eighteen to

&c. From this document the present social condition of the country will be seen; and it may be noted, that for the last five years there has been a progressive advancement in population, cultivation, trade, and other elements of prosperity. In 1830, the white population were computed at 1,500; in 1831, there were 200 acres of land under cultivation with the hoe and spade, and 100 acres of wheat were reaped; in 1832, there were 440 acres of grain crops; and in 1833, 600 acres; the progress has since been—

twenty-four feet, and its perpendicular height ten or twelve feet. It was composed of earth, fragments of coral or stone, and pieces of stick. On examining these mounds by clearing away three or four feet of earth, the eggs of the bird were found, measuring eight and a-half inches lengthwise in circumference, and six and three-quarters across. There was no increase of temperature in the mound.

The following Statement shews the Condition of the Colony as respects Population, Acres under Cultivation, Live Stock, Income and Expenditure, Commerce, Shipping, and Exportation of Staple Products, between 1834 and 1848: it has been prepared from various returns and documents, with a view of tracing the Progress of the Colony since its formation. I could not obtain any reliable data between 1829 and 1834.

	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.
Population, Land, Live Stock, &c.																
European Population:—																
Children, under 12 years	—	—	—	547	—	—	592	—	—	1,188	—	—	—	—	—	—
Males, above 12 years	—	—	—	898	1,152	1,302	1,269	1,706	2,115	1,714	—	—	—	—	2,818	—
Females, above 12 years	—	—	—	442	776	852	557	1,054	1,361	951	—	—	—	—	1,804	—
Total	1,600	—	—	1,847	1,928	2,154	2,354	2,760	3,476	3,853	—	—	—	—	4,622	—
Acres under Cultivation:—																
Wheat	564	1,156	1,363	1,253	1,400	1,471	1,650	1,899	2,039	2,884	3,283	3,313	3,977	2,975	3,316	—
Barley	100	155	209	253	240	260	337	335	444	447	538	522	506	554	672	—
Oats	116	126	128	141	100	98	48	130	129	120	79	63	125	51	133	—
Rye	—	—	7	5	16	77	50	33	71	32	28	15	58	50	100	—
Maize	—	—	—	—	—	—	—	—	—	4	17	19	31	20	38	—
Potatoes	15	31	32	36	—	—	50	—	71	81	77	76	139	—	120	—
Vineyard	—	—	—	—	—	—	—	—	—	—	—	—	—	—	114	—
Olive ground	—	—	112	115	—	—	200	225	280	274	306	269	299	271	224	10
Kitchen garden	—	—	240	276	701	819	800	706	330	713	532	551	—	1,862	2,320	—
Green crops	123	85	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	918	1,634	2,091	2,079	2,457	2,725	3,135	3,328	3,364	4,566	4,860	4,830	5,137	5,784	7,174	—
Live Stock:—																
Horses	162	167	216	254	271	367	500	858	1,069	1,202	1,231	1,430	1,727	1,841	2,095	—
Horned Cattle	500	646	829	837	1,052	1,308	2,318	2,917	4,122	4,861	5,376	6,508	7,583	8,639	10,919	—
Sheep	3,500	5,138	8,527	10,271	15,590	21,038	30,161	44,551	60,380	76,191	86,432	95,681	102,084	114,124	141,123	—
Swine	—	550	819	704	970	1,235	1,595	8,161	1,713	1,951	1,702	2,553	2,953	2,963	2,487	—
Goats	—	637	1,289	1,690	2,436	—	4,604	5,547	5,615	3,733	3,227	2,632	2,223	1,766	1,431	—
Total	4,162	7,158	11,680	13,756	20,319	23,948	39,178	62,034	72,899	87,938	98,018	106,231	116,570	129,393	157,855	—
Local receipts of revenue in £.	—	6,884	—	4,586	5,193	3,912	9,376	11,646	9,970	10,312	9,754	7,127	7,853	8,453	10,723	—
Parliamentary grant expenditure in £.	—	5,291	6,153	7,230	6,945	7,008	5,373	6,819	7,961	7,479	7,092	7,090	7,250	6,893	7,695	—
Commissariat, military expenditure in £.	—	8,703	8,049	11,544	11,344	13,199	11,440	13,219	12,344	10,732	9,973	10,746	9,864	10,265	11,545	—
Value of commerce:—																
Imports in £.	—	50,000	50,636	39,283	45,401	40,000	—	—	37,486	36,441	36,685	20,349	25,659	25,463	45,411	—
Exports in £.	1,020	1,740	2,850	6,906	6,840	5,448	—	—	7,089	13,364	13,653	13,609	20,223	24,535	29,598	—
Shipping inwards, in tons	3,120	4,048	5,587	3,031	—	16,805	39,611	39,850	32,436	17,130	10,002	7,855	6,365	5,406	15,494	—
Wool Exported:—																
Quantity in lbs.	—	—	—	—	—	36,450	50,000	—	84,640	122,495	140,155	145,254	291,368	229,247	301,965	—
Value in £.	—	—	—	—	—	2,278	—	—	7,008	6,125	7,257	13,363	13,363	11,464	9,666	—

Note.—There are no census returns between 1843 and 1848. The agricultural returns do not include King George's Sound, the Vasse, and Port Augusta districts. There are no returns of the imports and exports for the years 1840 and 1841, nor is there any return of shipping for the latter year. We have no return of the wool exported from the colony in the year 1841. Wherever there are blanks in this table no returns are procurable. * Vessels coastwise not returned after this date.

ABORIGINES.—The state of the aboriginal inhabitants in Western Australia is far superior to that attained by them in any other Australian colony. This most honourable peculiarity, however, though doubtless attributable, in the first instance, to the personal character and conduct of the early settlers, of whom an unusual proportion belonged to the better classes of society, and to the judicious policy pursued by the local government, appears to have been, nevertheless, in no small degree brought about by the very fact in other respects so injurious to the colony, namely, the sudden cessation of immigration, which not only left the same individuals to carry out the original system with regard to the savage, but rendered caution and forbearance, as well as firmness, obviously indispensable. The settlers are reaping their well-merited fruits, in the perfect tranquillity they enjoy, and the very considerable assistance they receive from the coloured population. So completely have the natives learned to appreciate their rights as British subjects, that they now appeal to the tribunal of the law in their differences with the "white fellows," and occasionally even in those with each other.

The numbers receiving regular and casual employment in 1848, was—

County or District.	Males.	Females.	Total.
Perthshire	130	32	162
Yorkshire	65	10	75
Wellington	65	11	76
Plantagenet	53	7	60
Toodyay district	52	53	105
Sussex	47	8	55
Murray	6	2	8
Total	418	123	541

Of these, many are employed about the farms as herdsmen and messengers, and occasionally in reaping and harvest work, some, more regularly as servants; but in general, they refuse all hard or steady work, and no wages will induce them to forego any amusement, or to settle permanently in one place. They are essentially creatures of impulse, absolutely devoid of any desire

* In a recent letter from Western Australia, dated March, 1850, is the following statement:—"We run the mail to York, to Bunbury, and to Vasse once a week, with natives only. The York native is mounted, and costs us some £36 a year. The Perth and Fremantle and the Guildford mails are run daily, with the utmost punctuality, and cost but the natives' rations, as they are prisoners on their parole, and there is a spare man in case of the sickness of any of these

to better their condition, and inclined to look with contemptuous superiority upon the laborious habits of their new associates. "White fellow," say they, "fool, too much! work, work, always work! Black fellow play, plenty play!" They appear, nevertheless, to be attached to the "white fellows," and are a merry, harmless, idle, good-natured race; sometimes very useful, often most provoking; on the whole, honest, but afflicted with a constitutional preference of mutton to kangaroo, which is the fertile source of compulsory labour on the roads.* Schools have been established for the children, and an institution is maintained by the Wesleyan body, assisted by government, at which indefatigable and judicious efforts are made to infuse into their minds the principles of religion and social improvement. Their quickness of apprehension as shown in the facility with which they learn reading, writing, arithmetic, &c., is said to *greatly surpass that of the white child*, and the mere experience of the schools would warrant the highest expectations of their future acquirements; with puberty the inherent idleness, and the restless longings after the wild and wandering life of the bush, are developed—and the clean, bright, intelligent child, able, not merely to read, but to understand what he reads, merges into the filthy, lazy savage, gorging himself to stupidity, and basking under a gum-tree. In some instances, however, the persevering care of the teachers has succeeded in inducing a few to remain on the establishment, to marry, and cultivate land for their own support.

The classified occupations of the white population in 1848 was, in—

Agriculture.—Occupiers, employing labourers, 124; ditto, not employing labourers, 176; agricultural labourers and gardeners, 476.

Grazing.—Employed in the care of sheep, 121; of cattle, 24.

Trade.—Shopkeepers, and other retail dealers, and their assistants, 64; bricklayers and masons, 32; smiths, 22; carpenters, joiners, plumbers, and glaziers, 98; tailors and shoemakers, 39; sawyers and splitters, 49; other non-agricultural classes, capital-men: these are all brought from Rottneest. The men who go from Fremantle to Mundurah, Bunbury, and Vasse, are also prisoners. We have no less than four native prisoner boys generally serving on board the *Champion*. You would be surprised to see one of them steering the vessel, going aloft to reef a top-sail or furl a royal. The governor has one now for a body servant, and a number of our teams are brought into town by them."

POPULATION, CULTIVATION, AND STOCK IN EACH DISTRICT. 395

ists, bankers, professional, and other educated men, their clerks and assistants, 44; civil officers, their clerks and assistants, 69; labourers, employed in labour not agricultural, including mariners, boatmen, fishermen, toll-collectors, road-makers, carters, &c., 241; domestic servants (male), 55; military men, 103; all other males, above fourteen, not included in the above, 106. Residue (women, children, and others), 2,690. The state of each of the settled districts is thus shown on the 10th October, 1848:—

Population, Land, Live Stock, &c.	Perth County.	York County.	Wellington County.	Plantagenet County.	Toodyay District.	Sussex County.	Murray County.	Total.
Population:—								
European, males	1,415	425	217	186	258	142	98	2,818
" females	1,098	199	141	114	107	82	51	1,804
Total	2,513	624	358	300	365	224	149	4,622
Aborigines, males	302	—	—	300	—	100	39	—
" females	221	—	—	150	—	50	34	—
Total	553	134	300	450	300	150	73	1,960
Acres under Cultivation:—								
Wheat	1,064	771	406	92	484	126	371	3,316
Barley	143	172	99	35	106	103	11	672
Oats	113	9	—	4	7	—	—	133
Rye	44	15	6	5	5	20	3	100
Maize	29	1	—	5	—	2	1	38
Potatoes	48	1	20	13	2	33	3	120
Vineyard	90	11	7	—	2	1	1	112
Olive-yard	8	—	2	—	—	—	—	10
Kitchen garden	146	21	24	12	10	15	15	243
Green crops	900	494	69	44	355	184	184	2,320
Live Stock:—								
Horses	394	610	124	251	460	184	72	2,095
Horned cattle	2,873	1,483	1,729	505	1,682	1,472	1,175	10,919
Sheep	8,888	62,409	3,415	9,582	49,180	6,020	1,629	141,123
Swine	786	543	167	85	367	134	205	2,287
Goats	1,050	25	198	—	31	43	84	1,431

Note.—The total of the return of European population includes the troops stationed in the colony, their wives and children, numbering altogether 162. It also includes 77 males and 12 females = 89, on board colonial vessels and on emigration parties. Of the aborigines 418 males and 123 females are regularly or casually employed by the Europeans.

GOVERNMENT.—The colony is at present ruled by a governor, aided by an executive council, consisting of the colonial secretary, advocate-general, surveyor-general, and collector of revenue. There is also a Legislative Council, composed of the above, in conjunction with the civil and criminal judge, and with three non-official members appointed by the crown; but it is probable that a more popular form will soon be adopted, under the provisions of a bill for the "better government of her Majesty's Australian colonies," which has undergone full discussion in both houses of the Imperial Legislature, while this volume has been passing through the press, and received its final decision in the House of Commons on the 1st August, 1850. The provisions of this bill, as first introduced to parliament, in March last, are stated at pp. 555—560: since then, the bill has undergone several modifications in the House of Lords. The proposed power to create a Federal Assembly of the Australian colonies, which, I feared, would prove a source of contention (see p. 558), has been withdrawn, as also the power to dispose of the crown lands by the said

Assembly (see note, p. 554): the qualification of voters is fixed at the possession of a freehold estate, of the clear annual value of £100; a £10 household franchise; or the possession of a leasehold estate or licence to depasture lands from the government, of the value of £10 sterling per annum. Under the amended bill, the colonial Legislative Councils have power to alter the qualifications of electors, and to divide the Legislative Council into two chambers; but they have not the power to declare there shall be a single legislative chamber, or that the nominees of the crown, whether official or non-official, shall be altogether excluded from that chamber. A Legislative Council may be established in Western Australia, as in the other Australian colonies, if petitioned for by not less than one-third in number of the householders within the colony, provided the province undertakes to defray the expenses of the civil establishment, which have been heretofore borne by the Imperial Parliament, such sums to be permanently granted to the crown out of the colonial revenues, and to form a civil list.

MILITARY DEFENCE.—About 100 men, including three officers, stationed in different places. There are barracks at Perth capable of holding sixty men; also small barracks at Albany, Kogonup, Bunburry, York, Pingarra, and Rottnest Island.

RELIGION.—The religious denominations in the colony, October, 1848, were—church of England, 3,063; Wesleyan methodists, 276; independents, 187; other protestant dissenters, 188; protestants, 311; church of Rome, 337; Mahomedans and Pagans, 90; religion not specified, 169. The church of England colonists in Western Australia have built ten churches—and several temporary places of worship—have subscribed 8,000 acres of land towards a bishopric fund, and have contributed liberally towards the maintenance of their clergy and the establishment of schools. The church at Perth, capable of holding 1,000 persons, has cost £3,500, and that at Fremantle, £1,500. There are seven clergymen of the established church, under the supervision of an arch-deacon; and three of the church of Rome, under a Roman catholic bishop. There are also several exemplary dissenting ministers.

EDUCATION.—The governmental schools are under a board of education; the instruction is entirely secular. In the Roman catholic schools the Irish national system is adopted.

Schools.	No.	Male Pupils.	Female Pupils.	Total.
GOVERNMENTAL:—				
Perth	2	55	28	83
„ infant	1	27	33	60
Fremantle	2	26	10	36
Murray	1	9	5	14
Guildford	1	18	6	24
York	1	28	—	28
Albany	1	14	19	33
In connection with R. } Catholic Church. }	3	61	105	166
Total	12	238	206	444

THE PRESS.—Two well conducted newspapers are published at Perth, and an excellent Western Australian almanac, replete with useful topographical and statistical information, has been published in the colony for the years 1842 and 1849.

CRIME.—Number of *felonies* in 1848—whites, 11; blacks, 47. Of *misdemeanours*—whites, 14; blacks, 4.

TAXATION.—The duties levied in Western Australia, in 1848 (Blue Book), were:—
On spirits imported, the produce and manu-

facture of any part of the British empire, 6s. per imperial gallon; ditto foreign produce and manufacture, 8s. per gallon; wines, produce and manufacture of British empire, 6d. per gallon; ditto, foreign, 1s. 6d. per gallon; cigars and snuffs, 2s. 6d. per lb.; tobacco of all other kinds, 1s. per lb.; live stock imported from any part of the British empire, 6s. per cent., other places, 12s. per cent.; goods, ware, and merchandise, the growth, produce, or manufacture of any part of the British empire, not otherwise charged with a specific duty, 6 per cent.; ditto of any foreign state, 12 per cent. *Internal duties*—Auction duty, 2½ per cent.; on registering transfer of landed property, 1 per cent.; spirit licences, £10 to £25 per annum; auctioneer and attorney licences; dog tax; licences to cut timber, on 640 acres, £20 per annum, or 10s. a month for each pair of sawyers; licences to occupy crown lands for pasturage, from £10 per annum for 4,000 acres, to £20 per annum for 20,000 acres. Licences for boats and for boatmen, warehouse rents, &c.

The revenue raised in Western Australia for three years was—

Details of Revenue.	1848.	1847.	1846.
Duties on spirits	£3,494	£3,689	£3,475
„ wine	507	403	288
„ tobacco	910	658	790
„ goods imported, <i>ad valorem</i>	2,143	1,533	1,393
„ goods sold by auction	92	84	117
„ transfers of land	22	44	35
Licences to sell spirits	547	482	498
„ to sell by auction	31	32	15
„ to keep dogs	80	41	51
Warehouse, rent of	—	—	—
Spirits in bond	111	48	33
Fees of public officers	107	164	148
Post-office department	298	296	332
Total	8,345	7,674	7,175
Sale of crown lands	463	251	124
Licences to occupy ditto	576	920	258
„ to cut timber	226		
Perth jetty dues	24	20	63
Repayment of crown debts	611	99	283
Rottnest establishment	158	69	39
Judicial fines and forfeitures	39	101	54
Miscellaneous	41	1	165
	2,147	1,461	986
On account of parliamentary grant	7,695	6,893	7,250
On account of juvenile immigrants from Parkhurst	277	—	—
Grand total	18,464	16,028	15,417

The civil expenditure in 1848 was—

Departments.	From Parliamentary Grant.	Colonial Fund.	Total.
Audit office	—	£293	£293
Colonial secretary's office . .	£681	127	808
Colonial treasurer's office . .	—	63	63
Commandant	177	—	177
Customs revenue	—	891	891
Council	—	150	150
Ecclesiastical office	292	376	668
Governor's office	1,118	100	1,218
Harbour-master	—	512	512
Medical department	266	270	536
Natives and native schools . .	744	221	965
Police force	—	690	690
Post-office	—	596	596
Public works	—	845	845
Registrar-general	—	20	20
Registrar of deeds	—	62	62
Roads and bridges	—	468	468
Rottneat establishment	—	393	393
Schools	—	212	212
Surveying department	1,620	961	2,581
Judicial department	1,558	694	2,252
Miscellaneous	133	2,250	2,383
Juvenile immigrant department	276	—	276
Colonial vessel	827	—	827
Total expenses	7,692	10,194	17,886

Total expenditure of the troops in Western Australia, during 1848, for pay, allowances, pensions, supplies, exclusive of the salt meat and candles sent from England, and transport, £10,501; repairs to military buildings, lodging money, &c., £1,044 = £11,545; add Parliamentary grant for civil expenses, from military chest, £7,128 = 18,673.

COMMERCE is increasing, and the exports fast rising to a level with the imports. The details of trade in 1848 were—

Countries.	Imports from	Exports to	Shipping Inwards.
United Kingdom	£19,218	£12,965	Tons. 1,416
British Colonies	24,922	15,612	4,888
Foreign	624	1,020	9,190
Total	£44,764	£29,597	15,494

Staple Products.—Wool, timber, oil, fish; to which will, probably, soon be added copper, lead, and other metals.

A *Geraldine Mining Company* has been established at Perth; capital £6,400, in 1,280 £5 shares. A silver-lead mine, in the Toodyay district, yields five ounces of silver to the ton of ore, roughly assayed.

Mother-o'-pearl shells, which are worth from £20 to £70 a ton, cover a district of Sharks' bay having six to twelve feet

water; and pearls as large as peas have been recently collected there. An island covered with guano, equal to that of Peru, has been recently discovered in the same neighbourhood; where the raspberry (an *acacia*, so called from the odour of the timber), sandal, and red ebony woods have been found growing within 200 yards of the beach. The sandal wood of Western Australia is a lucrative article of export; some sent by the *Viven* to Singapore, for the China market, sold for £21 per ton, leaving a net profit of £17 per ton. Her Majesty's dockyards are now contracting for the excellent ship timber of Western Australia, some of which (the *jarrah*) endures any time in water, and is not eaten by that destructive worm the *teredo navalis*; ships built with it require no coppering; a plank may be cut of any size; and there is enough of timber and knees, of the best kind, to supply the British navy for centuries.

A forest of the *jarrah*, or mahogany, at a distance of eighteen miles from Perth, and twenty from the sea, extends over a tract of at least 300 miles from north to south, with a known width of thirty miles from east to west. The trees are very fine; and it has been computed that this forest alone contains sufficient of this invaluable timber to build 200,000 line-of-battle ships, reckoning the largest amount of timber ever required for a ship as the average: 20,000 navies equal to all those of Europe might therefore, be constructed from this single forest.

The *jarrah*, and indeed all the heavy timber of the colony, is included in the genus *eucalyptus*; but the species are very numerous: of these, that called the *tuart* ranks next to the *jarrah* in value, and is indeed, in some respects, superior to it, but is not nearly so abundant.

The *white gum* much resembles the *tuart*, and partakes in its remarkable quality of scarcely shrinking in the process of drying; but it is looked upon with an evil eye by the settlers, as indicating the predominance of sand or of ironstone and clay in the soil.

The *red gum*, one of the least common of its tribe, though of no great value as timber, being subject to gum-veins, is easily worked, and much used in the colony for spokes of wheels, &c.: it is nearly equal to lance-wood.

The *morrel*, chiefly found in the Toodyay district, is highly esteemed for its toughness and strength.

The *great blue gum* is found in perfection in the neighbourhood of Nornalup and the Deep river, between Augusta and King George's Sound, where it attains the extraordinary height of from 100 to 150 feet, and measures fifty feet in circumference.

There are, besides, the *black butt*, *salmon gum*, and many others.

The ornamental woods of the colony are numerous, and many of them very beautiful in grain and figure. The *sandal wood* has been before mentioned. The *raspberry*, or *jam wood*, which somewhat resembles rose-wood in grain and colour, grows generally in the country within the range. The *casuarina*, or she oak, found mostly in the sandy districts near the coast, when well worked up, is a very pretty wood.

Besides these, there are several other kinds of ornamental woods, as the *banksia*, and various species of *dryandria*, one of which is called satin-wood by the colonial cabinetmakers.

Fisheries.—At present, only one vessel and about eighteen boats are employed. The Americans and French carry on extensive whaling pursuits in the very harbours of Western Australia, whose fisheries are among the finest in the southern hemisphere. The entire coast swarms with snapper, whiting, mullet, bream, kingfish, mackerel, &c., of the highest quality. The snapper weighs from 10 lbs. to 40 lbs.; and dried, sells for £16 per ton, at the Mauritius.

BANKING AND MONETARY AFFAIRS.—An excellent institution termed the *Western Australian Bank*, was established in June, 1841, with a subscribed capital of £20,000, in 2,000 £10 shares. The capital paid up is £5,544, by about 100 proprietors. The dividend paid for the last five years has averaged twelve and-a-half per cent. per annum. The paper circulation in July, 1849, was £2,652; the bills under discount, £10,360; and the deposits not bearing interest, £13,718. *Coin* of all descriptions in the colony, about £11,000.

Exchange.—Bills on her Majesty's Treasury, and on agents of Western Australian Bank, London, at par in 1848. Private bills on London, at thirty days' sight, five per cent. discount.

Prices of Produce in Western Australia in 1848:—Wheat, per bushel, 5s.; barley, 4s.; oats, 4s.; horses, £20; horned cattle, £6; sheep, mixed flock, 4s.; goats, milch, 5s.; swine, 10s. each; flour, per ton of 2,000 lbs., £16; wheaten bread, per lb. 2½d.; milk, 4d. per quart; butter, 1s. 6d.; cheese, 1s. 2d.; beef

5d.; mutton, 3½d.; pork, 8d.; rice, 2d.; coffee, 6d.; tea, 2s.; sugar, 3s.; salt, 1d. per lb.; wine, 4s. 6d.; brandy, 18s.; beer, 2s. per gal.; tobacco, 2s. 6d. per lb.

Wages for labour.—Domestics, £15 to 20; predial-shepherds, £36; farm servants, £24 per annum; trades, 6s. per diem.

It remains for me now only to notice two important features connected with the colony. I have already adverted to the advantages possessed by colonies which have public companies in England connected with their welfare. Western Australia, excepting in the short-lived instance of the *Australind Association*, has not hitherto had this collateral benefit. Earl Grey, however, with a view to the remedying of this defect, has sanctioned the formation, by act of parliament, of a *Colonization Assurance Company*, in London, whose operations for the promotion of colonization have commenced in Western Australia. The corporation, under the provisions of the act of the imperial legislature (13 Vic. c. 24), has rightly ordained that the responsibility of its shareholders be *limited* to the amount for which they have severally subscribed. The capital authorised to be raised in the first instance, is £100,000 in £10 shares, with power of increase, subject to the consent of the Lords of her Majesty's Treasury. The corporation is authorised to purchase and to hold lands to any extent in the colonies and dependencies of the British Empire: any emigrants conveyed or caused to be conveyed to Western Australia by the company, shall entitle them to receive land scrip to the value of £20 for each emigrant, male or female, above fourteen years of age, or for every two emigrants under that age. The land-scrip is to be taken in payment of crown lands in Western Australia, at the rate of 20s. per acre; corporation may require the governor to put up crown lands, under certain provisoes. Accounts of corporation are to be annually reaudited by the registrar of joint-stock companies, and the annual report to be sent to the Board of Trade. The operations of the company are not to extend beyond Western Australia, except the consent (a necessary and wise precaution where such extensive powers and privileges have been conferred) of her Majesty's Secretary of State for the Colonies, shall have been previously obtained. Taken altogether, the act is liberal, and may be beneficially worked for the interests of the shareholders of the company, and of the colonists. It is understood that the cor-

poration intend to purchase eligible sites in Western Australia, for the formation of settlements, and they propose to enable emigrants to lease lands from the corporation on the principles of Life Assurance; such lands, on the payment of a rent for a given period, or on the termination of the life of the leaseholder, to be the property of his heirs; thus the emigrant may be enabled to pay for his land, not out of capital, but out of profits to be realized from his own labours, aided by the fostering exertions of the corporation. Thus—A., aged 30, for an annual premium of £7 4s. 1d., is put into immediate possession of 100 acres of good land, and whenever he dies—even if within the first year—the land becomes the property of his representatives, without further payment. There are also calculations for limited periods of assurance. The company propose to devote a portion of its funds to assist in providing for all its settlements, churches and clergy of the church of England; and it will afford liberal assistance to other classes of Christians, according to the circumstances of each case. I believe this useful association has been projected and carried into operation by R. W. Nash, Esq., late member of the Legislative Council in Western Australia, by whose unceasing exertions the colony has been materially benefitted.

TRANSPORTATION.—Her majesty's government, in accordance with the strongly expressed desire of the colonists of Western Australia, have resolved to send out a moderate number of convicts to the colony, who will, at first, be entirely under the control of the government, and be employed in improving the harbours, opening roads, cutting valuable timber, or in such other public works as the government, in conjunction with a competent officer sent from England for the purpose, may consider most likely to develop the resources of Western Australia, and to remove some of the obstacles to the progress of the colony, by employing a competent force of labour upon undertakings to which private means have proved inadequate. The convicts to be selected for this useful purpose, will be those who from their conduct at their present places of detention, and from their having to undergo but a short period of imprisonment prior to becoming qualified for a greater degree of freedom, appear likely to behave in an industrious and orderly manner. When they are set free from the public works on account of

good conduct, their services will become available to the settlers; but if they should misbehave, and be therefore returned upon the hands of government, they will again be placed on public works at the expense, as in the first instance, of the British Treasury. There is no intention of assigning convicts to settlers, or of introducing in any form the system of assignment. There will be no interference whatever with the free character of the colony; and should parliament, as it is hoped, continue to grant an annual sum for promoting free emigration to those colonies which receive convicts, her Majesty's government intend to send emigrants of good character, and of both sexes, equal in number to the convicts transported to Western Australia.

By intelligence from Perth, Western Australia, dated April, 1850, it appears that the active population of the colony are in favour of these propositions, but they rightly deem that their efforts for the promotion of moral and spiritual instruction must be redoubled and watched over with increased vigilance. The statements given at page 409 to 419 of this volume shew that transportation, under proper management, is the most Christian course which can be adopted for the reformation of the sinner, and for the preservation of the community to which he belongs, from the effects of a renewal of his crimes. The absence of all spiritual instruction, the indiscriminate assignment-system, the terrific punishments adopted without the slightest effort to correct the evil tendencies of the criminals, and the pouring into a colony thousands of convicts without due admixture of free men and women, caused the necessity for cessation of transportation to New South Wales. But in Western Australia her Majesty's government are adopting a sound system, by which the United Kingdom may be relieved annually from the pressure of an enormous prison population, the expenses on the British Treasury materially lessened, and a fine colony, blessed with a genial clime and fertile soil, but with only 5,000 inhabitants to 1,000,000 square miles of territory, may be rendered attractive to free settlers of all classes, and have its prospects increased of becoming the seat of a large and flourishing free population.* [See Supplement.]

SUMMARY.—The limited number of pages to which each division of this work is neces-

* See Letter from Earl Grey to R. W. Nash, Esq., of 20th December, 1849.

sarily restricted, not only compels an abbreviation of different sections, but altogether precludes the discussion of several topics more or less connected with the four colonies whose description occupies the present volume.

The chief aim of this work being one of plain and practical utility, I have devoted the fullest assignable space to the details best calculated to illustrate *the progress, actual position, and resources* of these provinces, alluding only incidentally to the *flora and fauna* of this singular country, with which the splendid volumes of Gould and Angas, and the interesting delineations of Mitchell, Sturt, and other explorers, have already, to a considerable extent, familiarised the public mind.

But there remains another subject from which I turn with more reluctance, although the above-named authors have dwelt upon it at some length; and Eyre and Grey also have published the results of their investigation. I allude to the condition and character of the aborigines, whose preservation from extinction, and, if possible, conversion, deserves the most strenuous efforts on the part of a Christian nation, and is indeed the only compensation that can be made for the evils which the very presence of the white man, and the civilization, which has become a second nature to him, unavoidably brings to the savage. Viewing it in this aspect the

subject is one of deep and painful interest; to me it also appears very important in an ethnological point of view; and when in Australia I exhumed the body of a female aborigine who was buried in the solitude of the forest with the customs peculiar to her race; and I obtained, after execution, the body of a native chief, brought to the scaffold for the murder of an English shepherd, at Bathurst, New South Wales; I measured their skeletons, bone by bone, and minutely investigated their physical configuration. Having, however, arrived at my last page, I am reluctantly compelled to close the volume with a hope that when the historical, geographical, and statistical delineation of the colonies is completed, I may, with the aid of that liberal support with which the public has thus far sustained my labours, be enabled to present in a single volume a full and illustrated description of the aboriginal or native subjects of the British crown in various parts of the world, viz., the natives of British North America, of British South America, of Australia, of New Zealand, of India, of Africa, and of the islands in the Pacific and eastern hemisphere.

In conclusion, I cannot, I believe, offer a better summary of the facts contained in the preceding pages, than is comprised in the following tabular view of the colonies planted by England in Australia, as they stood in 1850.

The progress and state of the Colonies on the island-continent of Australia since 1850, given in Supplement.

Particulars.	New South Wales.	Victoria.	South Australia.	Western Australia.	Total.
Date of formation, A.D.	1787	1836	1836	1829	—
Area in square miles, about	500,000	92,000	300,000	1,000,000	2,000,000
White population, about	200,000	50,000	50,000	5,000	305,000
Number of acres to each inhabitant	1,600	1,117	3,840	128,000	—
Acres of land in cultivation	130,000	40,000	50,000	8,000	228,000
LIVE STOCK:—					
Horses	100,000	17,000	6,000	3,000	126,000
Horned cattle	1,400,000	400,000	100,000	12,000	1,912,000
Sheep	7,000,000	5,200,000	1,200,000	150,000	13,550,000
Swine	70,000	6,000	1,500	2,500	80,500
MARITIME COMMERCE:—					
Value of imports in £	1,300,000	500,000	400,000	45,000	2,245,000
Value of exports in £	1,500,000	600,000	500,000	35,000	2,635,000
Shipping tonnage inwards	140,000	70,000	40,000	5,000	255,000
Local revenue in £	300,000	100,000	120,000	10,000	530,000
Civil cost to Great Britain in £	—	—	—	7,500	7,500
Military cost to Great Britain in £	70,000	—	16,000	11,000	97,000
Taxation per head, in shillings	30	47	48	40	—
Consumption of imports per head, in shillings	130	200	160	180	—
STAPLE EXPORTS:—					
Wool, in lbs.	16,000,000	14,000,000	3,000,000	400,000	33,400,000
Tallow or Oil, in cwts.	60,000	28,000	3,000	—	91,000
Metals, in £	25,000	—	350,000	—	375,000
Chief town	Sydney	Melbourne	Adelaide	Perth	—
Population of capital	50,000	15,000	15,000	1,500	—

Note.—In the £79,000 stated as military cost of New South Wales, Victoria province is included. In the return of metals exported as from New South Wales, Victoria is also included. Round numbers are used.

SUPPLEMENTAL DIVISION.

CHAPTER I.

GOLD DISCOVERIES IN AUSTRALIA—THEIR PROGRESS AND PRODUCE.

In the preceding pages, the establishment and condition of the four separate colonies on the island-continent of Australia, have been fully shown up to the year 1849-50; since then the discovery of a new product has given an enhanced value, such as scarcely a century could have communicated, to two at least of these settlements,—created an extended commerce, emigration and enterprise, which have exercised a marked influence on the people of the United Kingdom, and attracted a degree of interest which is without precedent in colonial annals.

The existence of metalliferous wealth in Australia had for many years been surmised, not only from the finding of small portions of various metals, but also from scientific deductions, based on the geological structure and meridional direction of the mountain-ranges which traverse the east coast, from north to south, after the manner of the Andes, in South America, the Oural or Ural chain in Russia, and the Sierra Nevada in California.

In the *History of the British Colonies*,* published in 1834-5, I stated, generally, the existence in the Australian settlements of "gold, silver, blue and green copper ore, iron, lead, zinc, manganese, and coal" in various places; and also beautiful agates, opal, chalcedony, jasper, cornelian—white, pinkish, and blue—close-grained marble, fine porphyry, asbestos, white saponaceous pipe-clay, various sulphates of alumina, &c. Little attention was, however, then paid to these products, and all I could accomplish at that time, was to induce an examination of the nature, extent, and general value of our colonies. The subject was again dwelt on in the *Colonial Library*, issued in

ten volumes, in 1837-8, and in the *Statistics of the British Colonies*, published in 1839.†

In the previous pages of this work, written and printed in 1849-50, an endeavour was again made to attract attention to the vast wealth which I felt convinced would be found in Australia; under the head of *Mineralogy*, New South Wales, it was remarked, "gold most probably exists in large quantities;"‡ and under the same head, in the description of Port Phillip, it was stated "the volcanic character of the country, and the geological structure of the Victoria province, indicates the presence of rich minerals, but as yet little attention has been paid to the subject;—*the precious metals will probably be found extensively distributed.*" [Thus in first issue in 1850.]

One of the most distinguished geologists and scientific observers of the present age—Sir Roderick Murchison—who had investigated, under the authority of the Emperor of Russia, the auriferous portion of the Uralian Mountains, felt convinced, some years since, that this productive range bore a similitude to that of the Australian Cordillera. He arrived at this conclusion as the direct result of inductive reasoning, founded on a geological examination of the rocks, collected by Count Strzelecki, in Eastern Australia. A comparative view of these rocks and those of the Ural chain, was given in his address to the *Royal Geographical Society*, in 1844, and printed in its transactions. Not content with a mere philosophic announcement, Sir Roderick, in 1846, addressed the Royal Geological Society of Cornwall, urging the superabundant Cornish miners to emigrate to New South Wales, and there obtain gold from ancient alluvia, in the same manner as they extracted tin from the gravel of their native county; he alluded to some specimens of gold having been found, and distinctly argued that much more would be discovered. [It is observable that this statement was made *before*

* Issued in five volumes, 8vo. with Maps, &c.

† One large vol. prepared from official documents furnished to me by government.

‡ See pp. 504 and 608 of first issue; pp. 160 and 264 of present issue.

the discovery of gold in California.] In consequence of these confident predictions [the earliest which appeared in print respecting the Australian gold-fields] a Mr. W. T. Smith, of New South Wales, commenced a search, and found good specimens of gold ore in a matrix of quartz, on the western slopes of the Blue Mountains, of which he sent a sample to Sir R. Murchison, who also received similar information from Mr. Phillips, of Adelaide. Thereupon, Sir R. Murchison (November 5th, 1848), addressed a letter to Earl Grey, her Majesty's secretary of state for the colonies, stating his previous views as followed by the foregoing facts, suggesting a mineral survey of the region, and a declaration that the gold-field was open to the colonists on the payment of certain dues. A letter of thanks was transmitted for—"the interesting communication with regard to the discovery of precious metals in Australia," and a geological surveyor was subsequently sent from England to the colony. On various occasions, during the two following years, at meetings of the *British Association for the Advancement of Science*, of the *Royal Institution*, and in the article entitled, "Siberia and California," in the *Quarterly Review*, 1850, Sir Roderick endeavoured in vain, to rouse national attention to the known existence of gold in Australia, adverting strongly to the desirableness of opening out gold works in the colonies of that continent.*

Among the colonial investigators, the first who deserves to be mentioned is Sir Thomas L. Mitchell, the distinguished surveyor-general of New South Wales, to whom the colony is so largely indebted for his valuable explorations of the interior of Australia, and who has also made the scientific world of Europe his debtor. In the course of his first expedition, he adverted to the peculiar character of the country [see *Journal of Expeditions*, vol. ii. p. 13]. Subsequently, in 1846, when he discovered and

* Her Majesty's secretary of state for the Colonies, the Duke of Newcastle, has directed the original letter of Sir Roderick Murchison, which is in the archives of Downing-street, to be printed in the Parl. Papers on the *Gold Discoveries in Australia*, where it will be found in the documents laid before the legislature on the 18th of August, 1853, p. 44. The Duke of Newcastle also sent himself, on July 22nd, 1853, copies of the correspondence to the governor-general of New South Wales—Sir C. A. Fitzroy—in reference, as his Grace observed, to the "credit of (Sir Roderick), having, at an early period, pointed out the indications of gold in Australia."

named Australia Felix (now Victoria), he spoke with fuller confidence of the field there opened for the geologist and the miner, but I am not aware that he anywhere stated in print his belief in the existence of the precious metals.

During his last investigation of tropical Australia, the surveyor-general obtained fine gold embedded in quartz, but was advised not to make known the locality, lest the shepherds and others should quit their employment and proceed in search of the ore.

The Reverend W. B. Clarke, a colonial chaplain and scientific geologist, also, in the year 1847, published his views in the *Sydney Herald* as to Australia becoming an auriferous country. He says, that his opinions were founded, like those of Sir R. Murchison, on the similarity between the structure of the New South Wales and the Uralian mountains, and from their meridional direction; this was subsequently confirmed by the analogous conformation and position of the Californian ranges.

Some time since, Mr. Clarke brought gold from the basin of the Macquarie (river), and exhibited it to the members of the government and of the legislature, in the council-chamber itself, and to numbers of persons in the community: the matter then excited scarcely more than an incredulous smile. Mr. Icely, an old and respected colonist and member of council, who possesses extensive property in the Bathurst district, exhibited in Sydney specimens of quartz gold, but his representations on the subject were also unheeded. Shepherds and stock-keepers, who from time to time brought gold into Sydney, were supposed to have procured it from bush-rangers, who had melted down the produce of their robberies. One old shepherd, named McGregor, was in the habit of obtaining the precious metal from the neighbourhood of Wellington, for many years.

Other proofs were not wanting in support of scientific reasoning.† In 1849, Mr. W. T.

† Count Strzelecki, as shown at p. 153, carefully noted the geology of the Australian Alps and Blue Mountain ranges; but, although the word *gold* does not occur in his valuable work published in 1845, it appears that governor sir George Gipps, on the 2nd September, 1840, enclosed to Her Majesty's secretary of state a report from the Count, mentioning "an auriferous sulphuret of iron—partly decomposed, yielding a very small quantity of gold, although not enough to repay extraction"—which he found in the vale of Clwdd. I presume that the subject was subsequently forgotten by count Strzelecki.

Smith (the same gentleman referred to by Sir R. Murchison in 1848) produced to the colonial secretary a lump of gold, embedded in quartz, which he said he had picked up at a certain place, which he offered to make known to the government, upon being previously rewarded for the intelligence, by the payment of a large sum of money. The governor replied he could enter into no blind bargain on such a subject, but that if Mr. Smith thought proper to trust to the liberality of the government, he might rely upon being rewarded in proportion to the value of the alleged discovery, when its truth had been ascertained. To this Mr. Smith refused to accede, and there the matter rested; as the government, apart from the fear that the gold had been brought into the country, was unwilling to have the public mind agitated on the subject, lest persons should be drawn off from their customary employments.

In 1847-8, on the discovery of gold in California, 3,348 colonists quitted New South Wales, and sought, on the slopes of the Sierra Nevada, the precious metal, which existed in still greater abundance and purity in their own Blue Mountains. As might be expected, several diggers returned to Australia, and among the number was a Mr. Edward Hargreaves, who remembered that the geological features of the country in the vicinity of Bathurst resembled what he had seen in California. Thereupon he made diligent search for two months—and then, on the 3rd of April, 1851, announced to the governor-in-chief (Sir Charles A. Fitzroy) that he had succeeded beyond his expectations, and had made very satisfactory discoveries of the existence of abundance of gold in several localities on the crown lands; he proposed, therefore, to point out the auriferous districts to the government, if an award of £500 was made to him in the first instance, and subsequently such further compensation as the generosity of the government, and the benefit likely to accrue to the country would justify.

The governor gave the same answer that he had previously done to Mr. Smith, of Berrima, whereupon, on the 30th of April, Mr. Hargreaves, probably fearing that the matter could not longer be kept secret, as he had been employing people at Summer

Hill Creek (in the district of Bathurst) in digging for gold, declared he was quite satisfied to leave the remuneration for his discovery to the liberal consideration of the government, and named Lewis Ponds and Summer Hill Creeks; the Macquarie and another river in the counties of Bathurst and Wellington. The discoverer was then placed in communication with Mr. Stuchbury, the geological and mineralogical surveyor to the local government, who was directed to make a strict examination and report thereon at his earliest convenience.

On the 19th of May, Mr. Stuchbury, after a very cursory examination, reported that gold was being obtained in considerable quantities at Summer Hill Creek, about 400 diggers being engaged in the search, many of whom were without food, and no stores at hand.

On the 22nd of May, 1851, Governor Sir C. Fitzroy wrote to her majesty's secretary of state that grain gold had been found to the westward of Bathurst; but there were doubts as to "the veracity of the reports, which lead to a strong suspicion that the accounts of the nature and value of the discovery have been exaggerated by the parties reporting it for purposes of their own, and that the gold sent for inspection is *really Californian gold*."* The governor in fact considered the reports to be mainly fictions, but not so the colonists, among whom the news circulated like wild-fire, causing great excitement, and engrossing and unhinging the minds of all classes of the community. By the end of May, all official hesitation was removed as to the reality of this great discovery; the governor writing, on the 29th, to the secretary of state, says—"no doubt that gold has been found in abundance, and that the gold-field will be found to extend over a large tract of country. Your lordship will readily conceive the excitement which prevails throughout this community; thousands of people of every class are proceeding to the locality; tradesmen and mechanics deserting certain and lucrative employment for the chance of success in digging for gold, so that the population of Sydney has visibly diminished."† In the beginning of June, about 1,000 people were engaged in the search for gold at Summer Hill Creek, and obtaining large quantities in lumps varying from one ounce to three and

* Parl. Papers, 3rd February, 1852, p. 1.

† As many as 2,000 persons might be seen on the road to Bathurst: the fares by the ordinary vehicles were largely increased; the rates for conveying goods

from Sydney to Bathurst advanced from £2 10s. to £30. There was a perfect scramble by speculators in buying up every article of merchandize, especially flour, beer, and spirits, and all articles of outfit.

four pounds weight, the latter chiefly obtainable from fissures in the clay-slate rock which forms the bed of the creek. When assayed, the proportions were—gold, 91·150; silver, 8·333; base metal, 0·567=100—fineness, 22 carats; the actual value of the gold and silver being £3 18s. 4d. per oz., of which the gold was £3 17s. 10d. The miners were quiet and peaceable, but almost to a man armed.

Notwithstanding these facts, many settlers, especially the grazing class, discouraged, as they had done for years, the search for gold: even when it was found in considerable quantities, a Mr. C. C. Forbes, writing from Bathurst, and admitting that he himself picked up in one week to the value of £6 8s.; and saw one man dig out £36 worth—termed the further prosecution “a wild-goose chase,”—declared that the winter would “kill many,” and that “when the present diggings are exhausted, hundreds of miserable wretches will be sent back to Sydney starving.”*

The earliest measure of the government was to obtain the opinion of its law-officers, who declared that by custom and by legal decisions, all mines of gold or silver found within the realm, whether on the lands of the Crown, or those belonging to private individuals, belonged to the sovereign; thereupon some advised the governor to proclaim martial law, and peremptorily prohibit all gold digging, in order that the industrial pursuits of the country might not be interrupted. Sir Charles Fitzroy wisely foresaw that with the means at the disposal of the authorities, it would have been as futile to attempt to stop the influx of the tide as to check the rush of the people to

the gold-fields, without, as he humanely observed, “the risk of much bloodshed, which could not be justified on any just or sound principle of government.” Accordingly a proclamation was issued (22nd May) warning the public that all persons taking any gold or golden ore from any ground, or digging or searching for the same, without being duly authorized by her majesty’s colonial government, would be prosecuted both criminally and civilly, but that licenses would speedily be issued, on payment of a reasonable fee, authorising the search for, and collection of, gold. These were issued on the 3rd of June, on the payment of a fee of 30s. per month. The gold-producing country was divided into districts, each placed under the management of a commissioner or his assistant. The parties to whom licenses were granted had allotments marked out for them on the banks of the river or stream where they proposed to dig and work; usually two persons, paying 30s. each monthly, received 9 feet frontage; three, 15; four, 18; five, 21; six, 24; where there was no frontage to a stream, 20 feet square were allotted to each party of three persons. This distribution of space was made by the commissioner or assistant-commissioner, who issued the monthly licenses, performed the duties of a police-magistrate, held from time to time courts of petty session, removed all persons of known bad character, or whose proceedings were calculated to disturb good order, or persons selling spirits without a license; he was also answerable for the peace of the district entrusted to his care, for the maintenance of which a chief constable and a few mounted police were appointed.

BEFORE proceeding with an account of the successive steps of this extraordinary discovery, it will be necessary to offer some explanation to the general reader, in order that expressions occurring in the subsequent pages may be clearly understood,—especially with reference to some geological data, in addition to those set forth at pp. 53 to 55; 153 to 157; 261 to 264; 333 to 340; and 389 to 390.

We know from the inspired Mosaic record, that at some very remote period, this globe was in an æriform or gaseous state, “without form and void;” from this con-

dition it probably passed into that of a molten igneous mass, compounded of metals, semi-metals, and the other materials of which the earth is composed. On the creation of a firmament or atmosphere, the division of the waters, their gathering together into one place, and the consequent appearance of a slimy ooze, or more solid substance called land—the crust gradually cooled, the fluid metals and other ponderous materials sunk towards the centre; the surface became ultimately fit for the growth of vegetables—was then subsequently adapted for the sustainment of animal life, and thus finally fitted-up and furnished for the habitation of man.

* Letter in the *Sydney Empire* Newspaper, 2nd June, 1851.

But previous to this crowning work of the Almighty, it appears that the earth was, at different times, and in various parts, buried beneath the surface of the ocean, and raised again by submarine volcanic heavings; this is evidenced by the deposits of fossil fish and marine-shells, found at great elevations; as in the Pyrenees, at 8,000; in the Alps, at 10,000; in the Andes, at 15,000; and in the Himalaya mountains, at 16,000 feet above the level of the sea. During these successive changes, sedimentary rocks were formed by aqueous depositions, in which are found entombed fossilized remains of vegetables and animals—many of which have no living types; some of the latter containing the remnants of other extinct animals which they had swallowed for food.

Subsequent to the deposition of the sedimentary rocks, frequent protrusions took place of substances, which the pent-up fires in the centre of the globe forced upwards, in a state of fluidity, but which became hard by the action of the atmosphere. That this igneous condition of the interior of the globe is no theory, is evidenced by the fact that at a certain depth from the surface, the influence of solar heat ceases, and the temperature is equal for all latitudes; beyond this, the heat increases in a steady ratio to the extent of one degree Fahrenheit for every forty-five feet. Assuming this ratio to continue at a depth of about 150 miles (the diameter of the earth is about 8,000 miles), the heat would be sufficient to fuse any of the known rocks and all the metals.

Rocks are arranged under two principal heads—(1), stratified, sedimentary or aqueous; (2), unstratified, igneous or plutonic; the former being the result of the deposits of successive ages; the latter caused, as before observed, by volcanic action. The first comprise the sandy, slate and clayey rocks, and the varieties of limestone, chalk and marl; they are classified as primary, secondary, and tertiary, according to their relative age, which is known by the imbedded fossils—the elder never lying above its junior. The *primary* (besides certain crystalline rocks) includes the fossiliferous deposits, such as the Silurian, Devonian, Carboniferous, and Permian; the *secondary*, consists of the Trias, Lias, Oolitic or Jura, and Cretaceous; and the *tertiary*, comprises all the more modern formations above the Chalk.

The second or igneous division have a

crystalline structure, are devoid of fossil remains, and have evidently been formed under the action of intense heat and pressure: to this class belong basalt or trap, granite (composed of three ingredients—quartz, felspar and mica), porphyry, sienite, serpentine, green-stone, &c. These are placed beneath the sedimentary rocks, but are frequently found forced upwards through the crust of the earth to a considerable height, constituting mountain-peaks and ranges of great altitude. Between these two divisions, there are a series composed of the sedimentary rocks, and termed *metamorphic*; their character being transformed from that of aqueous to a similarity with those of the igneous rocks, by the agency of excessive heat, when granite and other substances were impelled from within towards the surface of the globe: the primary or sandy-slate and clayey rocks, being nearest to the centre are most likely to have their stratified structure thus changed and broken into innumerable cracks and fissures; they are principally known by the terms—gneiss (somewhat like laminated granite), mica slate, chlorite slate, &c. These metamorphic, paleozoic rocks,* as will be subsequently seen, are of the highest importance in reference to their connection with minerals.

Comparing the surface of the earth to crusts and layers, which may be peeled off like the coats of an onion, until a homogeneous substance, indicating the agency of fire, be arrived at, Mr. J. Scoffern (compiling from the practical surveys of Jukes, Clarke, and other geologists) arranges the Australian strata in descending order, as follows:—
 A. Raised beaches or reefs with shells, &c., same as now existing: B. Bone caves with extinct kangaroos; limestones with extinct plants like those now living; fruit trees: C. Shelly sandstone with oysters, cockles, sea-urchins, differing very considerably from those now living: D. Sydney sandstone; traces of plants: E. Coal-bearing strata, with extinct plants resembling those of Indian coal; Yorkshire oolite; fish of upper paleozoic type: F. Sandstone and other rocks with extinct sea-shells, like those in the carboniferous and Devonian limestones of Europe: G. Rocks with extinct shells and trilobites, like those of the Silurian rocks of Europe: H. Metamorphic schist, &c., with traces of fossils: I. Igneous rocks, such as

* From the Greek words *παλαιή*;—*ancient*, and *ζωή* *life*,—fossil animals being here found.

granite, &c.* Assuming this to be a correct succession, Mr. Scoffern infers an absence of the interesting series of stratified rocks observable in Europe, in which the wealdian and chalk deposits bear so important a part: hence he supposes that Australia "remained above the ocean while all the remaining portions (of the globe) at one period or another were submerged."† It is certainly very remarkable that types of animal races still exist in this strange island, while they have become extinct in every other country. The marsupial animals, such as the opossum, are now peculiar to Australia and America; indeed, almost all the quadrupeds in the former are distinguished by an abdominal pouch with nipples, to which the newly-formed fœtus, with scarcely the rudiments of limbs, is found adhering. But it is more than probable that this connecting link between birds and animals was, in a remote age, extensively distributed over the earth—fossil marsupials for instance have been discovered imbedded in the oolitic system of England and other countries. Yet the kangaroo, one of these marsupials, now exists only in Australia, and we have no record of its being known alive in any other region. It is also worth remarking that in the auriferous districts of New South Wales there are caves with the bones of enormous vertebrate animals, including those of *gigantic* kangaroos (see pp. 54, 156, and 263); and in the superficial drift of similar ages the mammoth, rhinoceros, hippopotamus, and other large animals, of species now extinct, are found at many places in Northern Europe.‡ There is much to learn—many data to be collected—various facts to be classified before the geological structure, age, and alternate elevations and depressions of Australia can be accurately stated; time, an increasing population, and the search after, and working of, minerals, will gradually develop truth; at present little more can be done than to collect and state accurately such facts as may be clearly established—not rejecting, however, rational theories, which are often stimulants to fur-

* Australian granite varies in different places; in some it exhibits the true *ternary* combination of quartz, felspar and mica; in others *binary*, one of the component ingredients being absent, generally the mica: the size of its crystalline constituents—more especially as regards the felspar—is very diversified, causing more or less of disintegration. I observed in China that the coarse decayed much more rapidly than the fine or close-grained granite, the effects of heat and moisture being soonest felt.

ther investigation, and frequently help, by the collision of differing minds, to reveal things which are mysteries to the scientific as well as to the unlearned. It is asserted that the Australian Cordillera must once have been at a higher elevation above the sea than it now is, and some suppose that their culminating points exceeded those of the Himalaya or of the Andes. That 20,000 feet of solid matter could have been carried away in successive ages, is doubted; but a supposition is hazarded that diminished height might have been caused by a downward movement of the sea bottom during the oscillations which have occurred in the Pacific and Indian oceans. It has been remarked by Darwin, Jukes, Dana, and others, that through several degrees of latitude within the tropics on the Australian coast, there has been a manifest subsidence, while several islands in the Indian or Malayan archipelago have been raised: this is attested by the dead coral deposits now found high above the sea, on the flanks of the volcanic islands—such as Java, Sumatra, &c.§ Changes of level, by vertical oscillations, above as well as below the present horizon, have been observed by the Rev. W. B. Clarke, between the latitude of Sydney and Bass Straits; Sir T. L. Mitchell, and other explorers have noted the same in different places (see p. 239), and this is further proved by the accumulation of tertiary and modern products on the south coast, for instance, at Gipp's-land and in the interior, as at the *Murray River*. It appears probable that there have been several oscillations in vertical ascents and descents, causing a wide spread decomposition of rocks, and deep alluvial deposits—as evidenced by receptacles 100 feet deep, filled with detritus of shale, sandstone, quartz, trappean debris, bones of extinct gigantic animals, and gold mingled with the whole. Whatever may be the age of this vast island, whether long submerged beneath the ocean, or comparatively recently elevated, it appears that the plants found in the old carboniferous formations of Europe have their

† The *Chemistry of Gold*, by J. Scoffern, M.B.

‡ At the Mount Macedon ranges there have been discovered large quantities of the bones of animals, generally of an extinct species, and indicative of creatures of enormous size—such as emus sixteen feet high, kangaroos of the dimensions of an elephant, and several other huge animals that embodied the joint qualities of the elephant, tapir, and kangaroo.—*Westgarth's Victoria* in 1853, p. 267.

§ See *Letter* from Rev. W. B. Clarke, 24 Nov. 1852

representative in the coal-fields on the east-coast of Australia.

The Rev. W. B. Clarke, who has examined a large portion of the colony geologically, viz., from beyond 32° towards the northward, and below 37° to the southward, and from the coast to the interior at various localities between 147° and 153° E., declares his conviction that so far as he has seen, the general succession, as exhibited in the order of rocks and their fossil contents, appears to have an intimate analogy with the succession in Europe. The same explorer has discovered fossils of the lower *palæozoic* or Silurian rocks, thereby proving that in this respect New South Wales is analogous to many European countries.

The geological features of the gold country in the neighbourhood of *Summer Hill Creek*, the *Turon*, *Frederick's Valley Creek* (*Ophir*), &c., New South Wales, was thus described in July, 1851, by Mr. Stuchbury, the government geologist, who was unremitting in his labours, and skilful in his researches:—

“The trend of all the waterways is into the river Macquarie, and the general run of the latter river is in the direction of the strike of the strata, viz., from east of south to west of north; its deviations from this course being consequent upon the hard character of many of the rocks, especially those of igneous origin, such as the granites, sienites, porphyries, basalt, &c. The whole area may be considered as schistose, principally clay slate, accompanied by nearly all the other varieties of slate rocks, in many cases greatly disturbed by the intruding rocks above-mentioned, of subsequent igneous formation, also by a large amount of quartz sides in veins or lodes, parallel to the strike of the schists. The quartz is amorphous, very nearly crystallized, and in the neighbourhood of the gold yielding localities it is accompanied by the titaniferous iron, crystallized and in loose grains. That the matrix of the gold is quartz in this district there cannot be any doubt, so many instances have occurred in which the quartz still remains attached, and interlaced by the gold, as also by the iron. No washings have yielded gold without the iron sand incorrectly termed emery, accompanying it.”

The schistose rocks being constantly disintegrated by the atmosphere, left the quartz

* See *Geological Quart. Journal*, London, May 1, 1853, No. 34, on *Gold Fields of Victoria*.

† Mount *Wingen*, in Brisbane county, New South Wales—(31° 54' S. lat.) is called by the Aborigines the “burning mountain,” and I heard in Australia from eye-witnesses, that smoke and flames have been seen at its summit. There are several extinct volcanoes in Victoria and in South Australia.

‡ Gold is frequently found in conjunction with iron, and it is also obtained combined with copper, arsenic, antimony, and manganese; but as gold is

dykes unsupported, and immense blocks were crushed as they gravitated down the slopes of the mountains and hills, letting loose in their course the tenacious gold, in large or small portions, which, from their gravity, were rolled on by the impelling torrent, until arrested in the cleavage fissures of slaty rocks, or deposited in sand or mud, especially at the bends or elbows of streams.

In Victoria, where gold has, as yet, been found most abundant, the portion of the Australian Cordillera, which passes through the province, at a distance of fifty to eighty miles from the coast-line, is stated to consist of recurring series, in successive steps of clay, mica, and flinty slates, all of which are nearly or quite vertical, with a north and south strike; these are intersected by numerous quartz veins, running at an acute angle. Vast trappean plains rise up to the base of the mountains, covering some of their lower slopes. It is in the vallies and gullies of this zone of mountains, not far from their junction with the table-lands formed by the trap, and at points remote from each other, that the rich golden deposits are found.*

As yet, we are not aware of active volcanoes in Australia.† Of the causes of igneous action—why it is occasionally dormant, and in some places extinct, we know nothing; we only see its extraordinary power in the changes it has effected in the face of our globe: equally ignorant are we of the formation of metals in the hidden womb of earth,‡ and their fusion in certain rocks, and on meridional lines, in obedience to some unknown but definite law. This much appears evident—that where the aqueous deposits are superficial, and their layers broken through by igneous rocks, such as granite, there gold, which is an elementary or simple substance,§ may be looked for, when disintegration of the three ingredients of which granite is composed takes place under the dissolving effects of the atmosphere. The felspar first gives way, becomes pliable, and is washed down

not liable to oxydation or rust, and all these metals are—when they in process of time dissolve away—the precious metal is purified from all extraneous substances, and frequently deposited in or near the beds of streams and gulleys through which mountain torrents flow—sometimes in scales, grains, or “nuggets” near the surface—sometimes at various depths either in “pockets” or holes—or scattered through veins of quartz and clay slate.

§ Of which there are about forty in the composition of our globe.

by the rain, then the mica is separated, but quartz remains longest *in situ*, and, from its ponderosity, is but slowly moved, except it be subjected to the force of violent torrents.

The numerous quartz veins which traverse the sedimentary or slate rocks, are evidently, in the opinion of all authorities, the matrix of the gold; the auriferous quartz is not milky-white, but of a delicate yellowish colour and a waxy lustre; the richest is that which is most broken and fissured—the fissures frequently containing a red ferruginous earth, in which particles of gold are imbedded: but, sometimes large quartz boulders are found deep in the auriferous clay, yet rarely containing gold.* As the slaty rocks which surrounded, or were intersected by the quartz, have been worn down or crumbled by time, the latter has been set loose, become disintegrated, or broken into fragments, and the gold being thus liberated, has descended by its specific gravity to the beds of mountain-streams, or been deposited in the chinks of rocks, or in the strata of successive layers of coloured clays, or in the alluvial collections formed many ages since at varying depths below the present surface.

It must not, however, be supposed that gold is only found in the lowlands or in valleys and beds of streams; the summit of *Hanging-Rock Creek*, in the Gwyder district, New South Wales, where the metal has been obtained, is 3,413 feet above the sea. In the southern districts of the settlement it has been procured in abundance at a height of 3,000 feet; and the Rev. W. Clarke saw some at *Gungarlin*, which has an altitude of 4,000

feet, and at a point on the gap between that river and *Eucum bene*, at a still greater height: the summits of the surrounding snowy Alps were, however, 3,000 feet beyond this elevation.

As a general principle, the richest auriferous deposits are found at the base or bed rock, on which the alluvium rests. These deposits have not occurred at any one period, but have accumulated by successive descents of drift (chiefly under sub-aqueous and former conditions of the surface), bringing with them the precious metal. This, by its specific gravity, and according to size, will descend to a greater or less depth among the surrounding earthy matter, and the renewal of each such occurrence would add to the quantity. If the water accompanying these drifts passed away suddenly, the gold would be mainly left on or near the surface, but if not, the metal attracting round itself a moist atmosphere, would gravitate through the sustaining medium, forming probably several strata, the largest pieces being in the lowest accumulation. This natural law is in accordance with what has been observed in Australia. How gold became melted into the quartz, or melted out of it, before it was removed from the parent bed—whether by the momentary or the slow action of such powerful forces as magnetism, galvanism, or thermo-electricity, is beyond our knowledge.

With the foregoing prefatory observations, we may now proceed to investigate, chronologically, the progress of discovery, and the extent of obtainment of the precious metal in the sister colonies of New South Wales and of Victoria.

THE first scene of the gold-digging operations was confined to the counties of Bathurst, Wellington, and Roxburgh, west of Sydney, along the western base of the great Blue Mountain range. Thither the population, bearing shovels and pickaxes, hastened from different districts, under the idea that gold was sown broadcast over the land. Arriving at the bed of a creek, or place where the metal was procurable, the mode of operation was as follows:—A large, round, flat-bottomed, shallow, tin dish was used for a

"prospecting"-pan, into which a shovel-full of earth and stones was thrown; the pan was then dipt into the water repeatedly, and shaken until the agitated earth and small pebbles were washed away; and the remaining gravel was then examined for gold, which, by its specific gravity, sunk to the bottom of the mass. If the "stuff" was found to be rich, then a "cradle" was used. At first these were of very simple construction, in form somewhat like the usual domestic article of the same name.

* Pieces of rock have been tested at Sydney in which no gold was visible, even under a powerful microscope, but which, nevertheless, upon analysis yielded at the rate of £520 worth of metal

per ton. Another specimen, in which gold was visible in small portions, furnished $1\frac{1}{2}$ lbs. from 100 lbs. of rock. The expected discovery of quicksilver will render these auriferous rocks very valuable.

At one end an iron sieve was fixed, and under it a board, sloping downwards, divided by ledges into three nearly equal parts. The earth and stones being thrown into the sieve, water was poured thereon while the cradle was being vigorously shaken by means of an upright wooden handle. The mud was thus carried off; and, if nuggets were among the stones, they were soon seen.

On the 1st of June, as before observed, 1,000 persons were engaged in the pursuit: the police-inspector (D. V. F. Scott) reported them to be quiet, well-conducted, and mostly doing well. On the sabbath, all parties left off work, and a Wesleyan minister preached to a large congregation. Within three weeks about £5,000 worth of gold had been obtained.

The diggings were chiefly in a creek situated beneath steep hills, varying in height, with flats from ten to twenty yards in width. In these flats the gold was found. Large pieces of rock had to be removed, the slate formation to be shattered by the pick, and the earth to be washed. The solid pieces of gold were obtained underneath and between the rocks and slate; the small portions were produced from the washing of the earth in cradles, the whole being an operation of great labour and uncertainty—a party earning but little one day and many pounds another day.

On the 3rd of June, when the issue of licences commenced, Mr. Hardy, the government gold commissioner appointed to grant the licenses, reported from his camp as follows:—"I am happy to say that I have not experienced the slightest trouble or annoyance from any person here; they refer all their disputes to me, without attempting to settle them by violence, and submit to my decision without a murmur. I have not sworn in any special constables; it is perfectly unnecessary, for every thing goes on in as orderly and quiet a manner as in the quietest English town. There is no drinking or rioting going on. One trifling assault is the only offence I have heard of; any other addition to my force therefore is unnecessary."

There were then about 1,500 diggers at work, whose earnings averaged £1 to 12s. a-day.

The first place which attracted the miners was *Summer Hill Creek*, which is distant forty miles from the town of Bathurst, with a well-defined and clear, but mountainous road; yet fit for carriage-travel. The *Canabolas* mountain (see map), which is

about one mile high is the centre, whence Summer Hill, and other more or less auriferous creeks take their rise.

The *creek* is narrow, very tortuous, with abrupt elbows, and confined between high ranges, causing the fall after rains to be very great. The water-course is so narrow, broken, and difficult, as to render riding impracticable for 100 yards. The adjacent hills consist of mica-slate, intersected in every direction with broad and well-defined quartz-veins, which are largely developed in the surrounding mountains. The gold found here, especially above the first falls, was large in the grain, often massive, seldom thin and scaly. It was frequently obtained from the earth and sand lodged in the fissures of a very hard green stone schist (slate), which dipped to the north-east, at an angle of 60°. Some of it was procured in the drift of a heavy shingle bar, almost always in detached, incrementitious portions, and in separate increments of quartzose crystals. The nuggets obtained varied in weight from two ounces to three pounds each. The bed of the creek has been lowering from an unknown period, and the alluvium in which the metal was generally found is far above the mark of the highest floods—in many places 60 feet above the present bed of the stream; when the waters rose, the miners worked towards the hills, and with equal success. In June, 1851, parties—four in number—procured from two ounces to seven ounces in a-day; occasionally they were unsuccessful: on an average, about 800 persons earned each 20s.; 600, 3s. to 4s. and 5s. a-day (expense of living, 10s. a-week, including meat, 3d. per pound; flour, 25s. to 30s. per hundred-weight); about 300 earned nothing, but they had neither the strength, energy, perseverance, or means of sustainment requisite for success, and, after looking about for a few days, went off in disgust.

The next field of operation was the *Turon River*, which rises nearer *Cullen Cullen*, in Roxburghshire; runs through the county, which it divides from that of Wellington; and, after a course of about 100 miles, flows into the *Macquarie*.

This stream passes through a valley which is several miles in width, with boundary ranges rising in successive heights behind each other, composed chiefly of mica-slate (without much mica), and but few quartz veins visible. In some places a compact porphyry is succeeded by a hard clay slate, forming here and there nearly perpen-

dicular elevations of 400 to 500 feet. The river is broad (50 to 100 yards), level, not very tortuous; has a smooth bed, in which, at times of flood, the water rises about twelve feet; in the dry season it is a chain of ponds, but water is generally found at the depth of a foot or two beneath the surface, in places apparently dry. Throughout nine miles of the river (so far as examined), gold-dust appeared, as regular as wheat sown in a field. The metal was probably washed down from the narrow, broken, and steep country, whence the stream takes its rise; for, as it was ascended, pieces, varying from a pennyweight to an ounce were found.

The township of *Sofala*, about twenty-five miles north of Bathurst, which rapidly rose in importance, was founded by the miners on this river. At *Ophir*, in *Frederick's Valley*, between the counties of Bathurst and Wellington, diggings commenced in the middle of June; and, on the 26th of the same month, Sir T. L. Mitchell suggested the formation of a township, which was successfully carried into effect.

The next *placer* noted was on the *Meroo Creek*, north of the Turon, which it somewhat resembles in its physical and geological features, but its riches were chiefly observable in tributary creeks, such as the *Louisa*, where the country is flatter, and the declivities gentler than those on the main river. Beautiful specimens of gold in the matrix were found here; the metal obtained was generally coarse, sometimes nuggetty. Mr. Commissioner Green reported that from forty to fifty thousand persons might find employment here on the table-land adjacent, and towards Campbell's Creek.

The aspect of the country in the vicinity of the above-mentioned creeks is wild, and in some places picturesquely grand. At *Pullen's Fall*, a crossing-place of the *Summer Hill Creek*, the country is much broken, and shows signs of evident volcanic action. Northward of *Pullen's Station*, there are seven or eight flat-topped hills, all of the same height, and appearing as if they had, at a distant epoch, formed a level plain of some miles in extent, until a subterranean convulsion had divided the plateau into several parts. The summits of these detached hills are covered with scoriæ, and from the edges hang rugged masses of basaltic rock, forming, as it were, a fringe round each table-land.* The mountains

* *Excursion in search of Diggers*, by a Gold Commissioner.

become more steep and broken as they approach the Macquarie, whose banks here are very precipitous; the river in many parts is blocked up with immense masses of rock, which have been separated from the precipices above.

The banks of the *Turon*, at its junction with the Macquarie in this neighbourhood are studded with the ever-fresh casuarina (mimosa), and highly picturesque, especially after the rains, when they are covered with fine grasses. The stream winds so abruptly and constantly, that at every few hundred yards the traveller must cross it; the side from which the river turns is invariably a cliff, formed by the constant washing of the water—the opposite banks have long sloping flats, which have been found to contain generally golden deposits.

In the early state of proceedings every "find" was viewed with great surprise: a Bathurst blacksmith got 11 lbs. weight of gold from one hole, at the Summer Hill Creek; a few days after, two lumps, one weighing 46 and another 20 oz., besides many lesser-sized nuggets; altogether, they were valued at £1,000. The gold was exhibited at Sydney, also a nugget weighing 3 lbs. 11 oz. troy, which was found at Ophir before the licences were issued.

In the early part of July, an educated aborigine—formerly attached to the "Wellington mission," and who had been for about seven years in the service of Dr. Kerr, of Wellawa—left the sheep which he had been tending in the *Mudjee* district, near Louisa Creek, and proceeded to his master's house, eight miles distant, to inform him that gold being the general topic of conversation, he had been searching around, and observing a glittering yellow substance upon the surface of a block of quartz, he broke off a portion with his tomahawk, and saw at once a great treasure. Dr. Kerr hastened to the spot; the precious mass, weighing from two to three cwt., was disengaged from its bed, among an isolated heap of quartz-blocks where it was deposited, but unfortunately broken in several pieces; the largest, about a foot in diameter, weighed 75 lbs. gross, and yielded 60 lbs. of pure gold. It presented an appearance not unlike a coarse sponge or honey-comb, and consisted of particles of a crystalline form.

The piece of quartz in which the gold was found, weighed about 300 lbs.; the pure metal weighed 102 lbs. 9 oz. The value of the whole was about £4,000 sterling; had the mass

been kept entire, the worth would have been doubled, as so large a specimen was never before found. The golden blocks were distant about one hundred yards from a quartz vein, which visibly covers an area of ten or twelve acres in extent, and stretches up the ridge from the Meroo and Merinda creeks, in the locality of an undulating and very fertile table-land, eighteen miles from the nearest point of the Macquarie river, thirty from the town of Wellington, and fifty-three from Bathurst.

Dr. Kerr gave the fortunate black shepherd and his brother two flocks of sheep, two horses, a team of bullocks to plough some land, and a quantity of rations. It is stated that the blacks hospitably invited some of the neighbouring aborigines to share in their success, and that the greater part of the sheep were soon devoured. The colonial government seized the gold as of right belonging to the crown, as Dr. Kerr had no license to dig or search for the same, but it was subsequently given up to the proprietors, Messrs. Thacker and Co., of Sydney, who had purchased it from Dr. Kerr.

The *Louisa Creek*, where this extraordinary block was discovered, soon attracted a mining population: one day a few diggers, named "Brenan's party," when about to knock off work to prepare their dinner, were stopped by one of the men striking his pick on a hard substance:—"I have got something here," said the striker—"Its only a boulder," replied his brother; but, upon prizing it up from the clay, a nugget weighing 341 oz. was discovered, which when sold by auction in Sydney, brought to the fortunate finders £1,155 sterling.

Of course there were great hardships to be endured—work all day under a burning sun—supperless evenings, and rainy or dewy nights—water pouring through the tents, saturating blankets and drenching everything—marches of twenty to thirty miles, and bivouacking in the bush, in a Scotch mist, after vain attempts to make a fire from green wood; and then, after three or four weeks' incessant toil, amid rapid alternations of sunshine, rain, and chilling cold, up to the waist in mud or water for hours—to open hole after hole without a spec, with funds rapidly exhausting, strength diminished, and energy excited by hope almost gone, and rheumatism in the bones—to find there was but an ounce of dust to divide among a party of four, was indeed disheartening.

On the other hand, in the lottery around, there were some large prizes being drawn; "it is pleasant," writes one miner, "to come out of the hole and hear the man at the cradle say—" *ten ounces each to day, lads!*"* In dry weather the thriftiest among the miners, when engaged in the search for nuggets, piled the "dirt" near their tents to wash it when the rains set in; sometimes this was very productive, as several pounds weight of gold might be extracted from a cart load of earth.

The excitement now became general, and the prices of all articles of food rapidly increased; flour, from £20 to £30 per ton; wheat, from 4s. 6d. to 10s. per bushel; butchers' meat, from 2½d. to 8d. per lb., and all other articles in proportion.

The public were so suspicious at first as to the quality of the gold, or alarmed at its abundance, that the price given by purchasers, was only 50s. per oz.—(the standard price in England being 75s. 10d.)—it however gradually rose, and in August, brought in Sydney 68s. 6d. per oz.

The measures adopted at this crisis of the colony by the able governor-general, Sir Augustus Fitz-Roy, and the colonial-secretary, Edward Deas Thompson, were marked by sound judgment, foresight, and common sense. Gold was at once rightly viewed as a raw product, which it would be desirable to raise for export as much as wool, tallow, or any other commodity of commerce; facilities were given for its search; Mr. Hargreaves, the original developer of the placers, was in June appointed a commissioner of crown lands, with a salary of £365 a-year, and 5s. a-day for the forage of two horses, and received instructions to prosecute his researches in conjunction with the colonial geologist and mineralogist, Mr. Stuchbury. The Rev. W. B. Clarke, who had so long endeavoured but in vain to draw public attention to the auriferous character of the country, now received a government appointment, and was sent forth well equipped with men and horses to investigate such districts as he might deem advisable. The experienced surveyor-general, Sir T. L. Mitchell, was despatched to explore the Canabolas range of mountains, with definite instructions for his guidance; and all these gentlemen concurred in reporting that it was more difficult to determine what was not an auriferous country than what was.

* Various terms were given to the precious metal—such as "dust," "stuff," "swag," &c.

A gold escort was established by the government, consisting of a strong carriage, capable of holding four armed persons beside the driver, and attended by two of the mounted police, who were stationed in small detachments along the line of road from Bathurst to Sydney. The escort left the diggings once a-week for the seat of government; parties sending gold thereto had it weighed in the presence of the commissioner, sealed in bags, numbered, addressed, and marked with the contents, in the presence of the proprietor, to whom a receipt was given; and who furnished in return the name of the consignee, to whom delivery was to be made on the production of a written order from the owner. The charge made by government for the conveyance was fixed at *two per cent.* on washed gold, which was valued at £3 4s. per oz.; gold obtained by amalgamation was, for this purpose, valued at £2 8s. per oz. This arrangement was beneficial to the miners, to the trading community and to the government.

Although the excitement consequent on the rapid acquisition of wealth was very great, yet the governor, writing in the middle of August, refers to the good conduct of the agricultural population in not neglecting their rural duties—a larger breadth of wheat was sown throughout the colony than had ever been put in the ground, and the sheep-flocks and cattle-herds were not left untended; fortunately, during the previous six or seven weeks, nearly 2,000 gold-seekers arrived from Melbourne, Adelaide, and the other neighbouring settlements. By the 20th of August the weekly escort brought from Bathurst 3,614 oz., valued at £12,000, and in this month the governor transmitted to the queen, by Captain Erskine, of H.M.S. *Havannah*, two handsome boxes, made of colonial woods, containing specimens of gold in its various forms, as found at the *Ophir* and *Turon* diggings. These specimens, when viewed through a strong magnifying-glass, exhibited singular beauty. Her Majesty was pleased with this tribute of respect from the colonists, and ordered it to be placed among the public property at Windsor Castle.

A practical illustration of the production of the precious metal was afforded by the shipments, up to November, 1851, being about £300,000-worth. By this time the demand for labour greatly increased, and wages and the prices of provisions became largely augmented. The legislative council,

however, refused to vote any increase of expenditure for raising the pay of constabulary, and claimed the right of the revenue arising from gold being, with other branches of the public income, placed under the control of the local legislature. Thereupon Governor Fitz-Roy assumed the responsibility of ordering the necessary payments out of the territorial or crown revenue, pending instructions from her Majesty's secretary of state; who complied with the wishes of the colonists, and public business and the security for life and property, remained unimpaired.*

In order to promote the introduction of immigrants, to provide for the industrial wants of the colony, in the event of the gold-fields depriving the employers of labour of the persons necessary to the carrying on of their operations, the governor, with the consent of his legislative council, raised a loan of £100,000, which was transmitted to her Majesty's emigration commissioners in England for the above purpose. This commendable measure was justified also by the rapid augmentation of all branches of the public revenue. For monthly licenses to dig and search for gold, the amount received from the 3rd of June to the 31st of December, 1851, was £30,890; and, for the conveyance of gold by escort, £2,919=£33,809.

At the close of 1851, a large number of diggers were at work in different parts of the auriferous country, and the governor reported that, during the previous seven months, "good order and regularity have been maintained there; no serious crimes of any kind have been committed,† and the roads have been perfectly safe for travellers; and, notwithstanding the diversion of so large a number of people from their previous ordinary pursuits, the shearing has been got over, and the harvest (a most abundant one) gathered in without any serious impediment or difficulty, and with much less additional expense to the flock-master and farmer, than could have been anticipated."‡

During the shearing season abundant labour was found; at the New England stations the price for shearing, up to December, 1851, was 2s. 6d. the score, with a full ration, and 2s. 9d. with a dry ration: but it was remarked that the clippers were new men, few being able to clip more than sixty sheep in a day; whereas, before the discovery of gold, shearers were found in the

* At this period the total number of troops in the colony was only 380 rank and file.

† Parl. Papers, 14th June, 1852, p. 8.

sheds who could turn out from 100 to 120 sheep in a day. Sixty was formerly the limit permitted in the Hunter River district, in order to insure a clean clip: now there was no limitation, provided the work be well done. In November and December, washers received 4s. a-day; a man, shepherding and watching, £30, with a single ration; shepherds, only £22; and watchmen, £20 per annum.

The moisture of the season of 1851, caused an increase in the weight of each fleece in the Bathurst district from one pound ten ounces to two pounds ten ounces.

The wealth of the colony rapidly increased. Government granted sites for churches, and clergymen were appointed, for the purpose of performing their clerical functions, at several localities: in fine, this wonderful discovery was, as previously observed, equivalent to adding a century of ordinary prosperity to the material condition of the community.

On the 10th of September, definite intelligence reached London (dated 22nd of May, from Sydney), as to the find of gold in New South Wales. The Royal Exhibition of Industry was then open, and crowds flocked thither to see the first nugget from Australia, which was a fitting consummation for that great gathering of nations, and afforded a glorious prospect of the benefits which might be expected from the emancipation of commerce from its shackles, and a due appreciation of the rights of labour.

VICTORIA GOLD-FIELDS.—Having now brought the narrative of gold-discovery in New South Wales to the close of 1851, it will be necessary to retrace our steps chronologically for a few months—to examine what was doing in the sister colony of Victoria, formerly called Port Phillip.

When the yield of gold was found to be certain in the Bathurst districts, a large number of persons quitted Melbourne—some departing over-land, others by sea—in the hope of being immediately enriched.

By the middle of June, five vessels were laid on at Melbourne for the conveyance of passengers to Sydney; and alarm was felt throughout the settlement lest the flocks would perish for want of shepherds, while agriculture would be entirely abandoned: these fears were, however, soon removed.

In August there was considerable excitement in Melbourne respecting the alleged existence of gold in the *Pyrennees*, and other mountain ranges. Some of the local jour-

nals derided the idea, and urged a search for coal and copper as a matter of far more consequence.

On the 25th of August Lieutenant-governor Latrobe announced to earl Grey, that “within the last six weeks undoubted proofs had been adduced of the extension of the gold-fields to this colony:” and stated that he was “officially made aware of three distinct localities, where a considerable number of persons were congregated for the purpose of obtaining the precious metal.” A proclamation was therefore issued, securing the rights of the crown, and licenses to dig and search for gold were granted, as in New South Wales, on payment of 30s. per month.

The first places where it was obtained were at *Anderson's* or *Deep Creek*, sixteen miles from Melbourne, where the metal was found in grains among slaty rocks; at *Clune's diggings*, ninety miles from Melbourne, on one of the head waters of the West Loddon river, in an alluvium, composed in a great measure of decomposed quartz rock; and at *Boninyong*, an extinct volcano, a remarkable conical hill, seventy-five miles from Melbourne, and forty-five from Geelong, embedded in quartz. At the first-named place, constant rains and floods interposed such obstacles to the carrying on of works in a water-course, that it was soon abandoned. The second-named was deserted, not from unproductiveness, but because Boninyong promised a more lucrative reward for labour. Here 500 licenses were issued in September, 1851.

The following is from a printed copy of the regulations to be observed by the persons digging for gold or otherwise employed at the gold-fields:—

“1. This license is to be carried on the person, to be produced whenever demanded by any commissioner, peace-officer, or other duly authorised person, and is not transferable.

“2. No mining will be permitted where it would be destructive of any line of road which it is necessary to maintain, and which shall be determined by any commissioner, nor within such distance around any store as it may be necessary to reserve for access to it.

“3. It is enjoined that all persons on the gold-fields maintain a due and proper observance of Sundays.

“4. The extent of claim allowed to each licensed miner is twelve feet square, or 144 square feet.

"5. To a party consisting of two miners, twelve feet by twenty-four, or 288 square feet.

"6. To a party consisting of three miners, eighteen feet by twenty-four, or 432 square feet.

"7. To a party consisting of four miners, twenty-four feet by twenty-four, or 576 square feet: beyond which no greater area will be allowed in one claim."

Adventurers flocked to the centre of attraction, and by the 6th of October, no less than 1,300 licences were issued for the current month. A more valuable site than *Boninyong* was soon discovered at a place called *Ballarat*, seven miles distant, and about ten miles N.W. of *Warraneep*, a silent cone similar to *Boninyong*, rising on the same ridge or watershed. The formation appears to be the ordinary quartz, iron, sandstone, and clay-slate, with an out-cropping of granite in patches. The principal workings commenced here at a place termed *Golden Point*, which superficially presents no features differing at all from any other of the numerous forested spurs which descend from the broken ranges at the foot of the higher ridges, and which bound the valley of the *Leigh* on either side.* Yet at this particular point, especially at the north and north-east portion of the extreme slopes and extremities of the spur, there was a deposit of the precious metal far greater, within a limited area, than any that had been previously discovered. Early in October there were about 500 "cradles" in use on the stream, irrespective of other expedients for obtaining the ore; 2,500 miners were working or making preparatory arrangements, and at least 100 new arrivals joined them daily. The quantity of metal obtained was large; one party raised 16 lbs. weight by the labour of a forenoon, and was known to have secured 31 lbs. weight by one day's work. Mr. Latrobe himself saw 10 lbs. and upwards, the produce of a single working in one day, and this was not an isolated case. "Many parties," he says, "of four men shared, day after day, 10 oz. per man." A rough calculation induced him to believe that on an average for a considerable time the yield was 700 oz. and upwards per diem. Other ranges equally productive were soon opened in the valley and adjoining glens, as well as on the ranges. A section of the working showed—(1) red ferruginous earth

* *Despatch* from lieutenant-governor Latrobe, 10th October, 1851.

and gravel; (2) streaked yellowish and red clay; (3) quartz, gravel of moderate size; (4) large quartz, pebbles, and boulders—masses of ironstone set in a very compact clay, hard to work; (5) blue and white clay; (6) pipe-clay. Such was the general order, but the proportion in which they were distributed was very variable. In some workings the so-called pipe-clay, which contained no ore, was reached at ten or twelve feet; in other places not at thirty or upwards; the richest deposits were found in the small veins of blue clay. The metal was usually obtained in rolled or water-worn lumps of various sizes, from a quarter or half-an-ounce to one or two ounces in weight, sometimes incorporated with round pebbles of quartz, at other times without any mixture whatever, in irregular, rounded, or smoothed pieces, and again in fused irregular masses of pure metal, of great beauty, weighing occasionally seven or nine ounces. Not unfrequently it was found combined with quartz, pebbles, or gravel, of various sizes, evidently united to them while in a fused state, and also on the surface of detached masses of ironstone, but it was procured in greatest abundance in the clays, in the form of rounded or flattened grains.

In October, it was estimated that there were 10,000 diggers at Ballarat and the other fields, whose aggregate earnings were £10,000 a-day. But, in the middle of October, a new district, forty miles distant, began to rival Ballarat, and attract to itself the more roving part of the gold-seekers—this was *Mount Alexander* (formerly called *Mount Byng*), situated seventy-miles north-west of Melbourne, in 37° S. lat., 144° 20' E. long. It is of granitic formation, with a rugged, flattened outline, rising a few hundred feet above the surrounding slate-rock ranges. In the neighbourhood of this mount are two creeks, *Forest* and *Fryers*, which have been more productive of gold than any other known region of the globe—both tributaries of the *Loddon River*. For six to ten miles along the banks of these creeks gold was found extensively distributed, a shepherd being the first person to draw attention to the neighbourhood. As population increased, the "dirt" was soon obtained in large quantities; four or five pounds' weight of pure metal being obtained by one party in the course of a few hours. There was nothing to distinguish *Forest Creek* and the adjacent ranges, from hundreds of similar localities around; but the bed of the valley

appeared to be formed of the inclined layers of slate-rock, covered with an irregular deposit of gravelly clays, similar to that found at Ballarat, but not so deep or so compact, requiring therefore less labour to reach the veins of clay lying on the slate, in which the gold is generally found; it was, however, sometimes collected on the surface.

The success of some individuals was very great; one man dug up eighty pounds' weight in a very brief period; a drayman obtained £1,100 as his share in a party after a few weeks' digging. For several days in succession from three to five pounds' weight have been procured from a single hole. A baker and grocer returned to Melbourne, after a few weeks' absence at the mines, with £8,200. The progressive yield will be seen, to some extent, by the quantities transmitted to Melbourne through the weekly government escort. From Ballarat the yield increased from 121 oz. on the 30th of September to 4,719 oz. on the 5th of November: from Mount Alexander, 228 oz. on the 28th of October, which augmented to 10,588 oz. on 26th November.

On Wednesday, November the 19th, the escort brought from Mount Alexander and Ballarat, 10,138 oz.; on the ensuing Wednesday, 12,106 oz. = 1,008 lbs. (rather more than half-a-ton); on the next Wednesday, 16,669 oz. = 1,389 lbs.: this astonishing yield went on increasing, and on the following Wednesday, the escort-cart, containing 26,656 oz. = 1 ton 221 lbs. 4 oz., broke down with its load, and was delayed a day beyond its time in reaching Melbourne. All this was quite independent of the large quantities reaching Melbourne and Geelong by private hand, as many of the gold speculators thought the government charge of one per cent., for a distance of seventy-five miles, without any guaranteed safety, an excessive freight; the lowest estimate of the transmissions by private hands in five weeks, was 28,353 oz., or one-third of that conveyed by government escort.

The excitement now became very great, and the whole structure of society was completely disorganized: about 6,000 people were congregated at and near Ballarat, and more than 12,000 within an area of fifteen square-miles, in the neighbourhood of Mount Alexander. In addition to a steady stream of population from the settled districts of the province, there was also a large and increasing influx, by sea and by land, from New South Wales and from South Australia, and across Bass Straits from Tas-

mania. Almost every ship that arrived in Port Phillip from England or from foreign ports was immediately deserted, and none but the captain, and sometimes a mate or a boy, left to take charge of the vessel.

The effect of the gold discoveries was more quickly felt at Victoria than at New South Wales, owing to the proximity of the diggings, the more limited number of the inhabitants of the chief towns, and perhaps the less settled and more newly located population. In the beginning of October, the towns of Melbourne and Geelong, with their large suburbs, appeared almost deserted by the male inhabitants, and all the active bustle of drays and traffic had ceased. Not merely the idlers and day-labourers hastened to the gold-fields, but shopmen, artizans, and mechanics threw up their occupations; left, says the lieutenant-governor, their employers, their wives and families to take care of themselves, and run off to the workings. Responsible tradesmen, farmers, clerks of every grade, and not a few of the superior classes followed—

“Some, unable to withstand the mania and force of the stream, or because they were really disposed to venture time and money on the chance, but others, because they were, as employers of labour, left in the lurch and had no other alternative. Cottages are deserted, houses to let, business is at a stand-still, and even schools are closed. In some of the suburbs not a man is left, and the women are known for self-protection to forget neighbour's jars, and to group together to keep house. The ships in the harbour are, in a great measure, deserted; and we hear of instances, where not only farmers and respectable agriculturists have found that the only way, as those employed by them deserted, was to leave their farms, join them, and form a band, and go shares—but even masters of vessels, foreseeing the impossibility of maintaining any control over their men otherwise, have made up parties among them to do the same. Fortunate the family, whatever its position, which retains its servants at any sacrifice, and can further secure the wonted supplies for their households from the few tradesmen who remain, and retain the means of supplying their customers at any augmentation of price. Drained of its labouring population, the price of provisions in the towns is naturally on the increase, for although there may be an abundant supply within reach, there are not sufficient hands to turn it to account. Both here and at Geelong all buildings and contract works, public and private, almost without exception, are at a stand-still. No contract can be insisted upon under the circumstances.”*

No ordinary interests, principles, or considerations were sufficient to withstand the temptation to depart. Ladies were obliged to cook the meals for their families,

* Report from lieutenant-governor Latrobe, to her Majesty's secretary of state, 10th October, 1851.

scrub the floors and fill all the offices usually performed by menials. An idea prevailed among some of the labouring classes, that all the poor were to become rich, and the wealthy to become poor. An amusing instance of the prevalence of this impression occurred in the case of the wife of a poor man who possessed the only mangle in Geelong; when her husband became suddenly enriched at the diggings, the proprietress, in grateful return for patronage and kindnesses received from the "Lady-mayorress," called to give "her worship" the first offer for the purchase of the mangle. The signs of the times were manifested in the geological terms common among the people; the watch-house was termed a "trap" formation, and heavy fines "auriferous deposits;" public-houses were said to be full of "quartz;"—brandy and hot water was called an "amalgam;" a reply a "retort;" a bed a "stratum," and a baby a "recent formation;" everything, in fact, was geologically stricken, and pick-axes, shovels and "cradles" were in general demand.

It has been well observed by the Rev. W. Arthur, one of the able and esteemed secretaries of the Wesleyan body:—"Men's heads were turned with the whirl, and away they plunged, madly diving for gold—a well-behaved, sheep-breeding, sheep-eating, sleek and sober colony, all wool and tallow, comfort and prosperity, became the noisiest country in the world;—talked of, written of, legislated for, envied, abused, praised, coveted, and, above all, hurried to—by energy as its own place—by laziness as the shortest road to live without doing anything—by avarice as its heaven—by generosity as the best hope of lifting up the grey head of a ruined father—by money as its market—by poverty as its relief—by theft as the land of plunder—by honesty as a way to pay debts—by vice as an open sphere—by piety as the scene for a mission;—all this rushing in red-hot, and bringing to one point every passion and every project that youth or age, ambition, energy, whim or genius could foment, the whole stirred by the burning hope of gold—gold—gold, has poured itself out—is pouring itself out, on those once peaceful plains, and there is a heaving and sweltering, as when a water-spout is discharged upon the sea."*

* See a graphic article upon *Our Australian Possessions* (in the *London Quarterly Review*, for December, 1853,) written with all the power and spirit of one of the most christian authors of the present day.

By the middle of December, the *furor* became intense; the produce of the Mount Alexander diggings was now calculated by the hundred-weight, and arriving in Melbourne at the rate of two tons per week; about 20,000 individuals were congregated on the four principal fields, and scattered over the adjacent country to the extent of twenty square miles. A pound weight of gold was considered small remuneration for a party; many secured five or six pounds, and there were instances of as much as fifty pounds, valued at £1,600, being the produce of a few hours' labour. Large quantities were scraped from the very surface of the ground, and everywhere the ore was found deposited under the alluvium, immediately above and in the fissures of the slate-rock.

Other workings, nearly equally prolific, were discovered down the *Forest Creek Valley*, to its junction with *Barker's Creek*, a secondary branch of the *Loddon River*, upon which and in the converging gullies the labours of the miners were continued for many miles. Another rich field was opened at *Bendigo Creek*, twenty-five miles to the north-east of Mount Alexander, and about 100 miles from Melbourne.

The strata at Bendigo consists of one foot of dark firm loam, a few inches of gravel and clay, changing lower down to solid, tough clay, red, yellow, or veined and tinted with various colours, which continues for eight or nine feet, with occasional small seams of gravel; next, a solid, hard mass, three to four feet thick, of gravel, quartz, and clay, so closely kneaded as almost to defy the efforts of a steel-armed pick; below this concrete a bed of gravel, with considerably less clay, varying in depth from a few inches to two or three feet; and, underneath, a bottom of "pipe-clay," depth unknown: six or eight inches of the gravel and clay bottom, with about two inches of the upper stratum of pipe-clay, forms the washing stuff, in which gold, in greater or less quantities, is always found. Ironstone, mixed with the gravel, is a good—a blue clay on the pipe-clay a bad, indication: the gravel is composed of quartz, ironstone, granite, white and red sand-stone, clay-slate, blue slate, and other varieties, with abundance of mica. Large boulders of quartz—some many tons' weight—are frequently found at the depth of twenty feet.

The auriferous districts are usually broken by deep valleys and precipitous steeps; the hills are thickly forested; the soil poor and

gravelly, and the surface strewn with angular fragments of white quartz. At the western base of the sombre but golden hills, park-like plains stretch for many miles, diversified by numerous dome-like or flat-topped elevations, now clothed with verdure, but which, at no very distant period, were active volcanoes—traces of the flowing, soft lava, being still visible. Where gold is obtained within twelve inches of the surface, it is usually disseminated in a quartzose gravel; at lower depths it is almost invariably imbedded in clay—generally of a tenacious character.

The diggings are classified as *surface* and *pit* or *hole* workings: in the former the gold is generally found diffused through the gravelly soil to the depth of six to twelve inches, beneath which there is a stiff red clay, containing little or no gold; it is however procured from pits sunk at depths varying from three to thirty and even sixty feet. In some places the gold is lodged in a grey clay, which fills the fissures of the vertical slate-rock, where it impedes the channel of a creek; here the depth is three to ten feet: in others it is found in the dry gully or ancient channel of an auriferous stream, whose bed has been sometimes narrowed by converging hills, or expanded into open flats or gentle slopes; but the breadth of the area which yields gold is usually only a few feet, rarely more than a few yards: the strata varies from a sandy gravel to a tenacious clay, which, when first turned up, is of a bright red, yellow, or whitish hue, soon fades on exposure to the air: the latter is called “pipe-clay” by the miners; and, when reached by them, not further penetrated. Another sort of deep-pit diggings takes place on the crests and sides of low-rounded hills or acclivities, near the auriferous gullies: the soil stiff—blue, red and yellow clays, with the frequent occurrence of beds of a very hard, reddish concrete, composed of quartz and slate-pebbles, or conglomerates of lava, trap, and quartz. In these localities the “find” is very uncertain, but, in many places, extraordinarily rich—nine pounds of gold being taken from one tin-dishful of bluish clay, the dish being fourteen inches in diameter, and five or six inches deep. “Pockets” (as they are termed by the miners) of immense value are found in some of these rounded alluvial hills, imbedded in red or yellow clays, lying immediately on the fundamental slates, or on the “pipe-clay,” *i. e.* soft shaly strata.

At first, gold was eagerly bought at 64s. per oz.; but, as the quantity increased, a panic ensued, until the price fell to 55s.; after which it rose, in October and November, to 60s., and has since gradually attained a market value of upwards of 70s. per oz.

During December there were from 16,000 to 20,000 people at the Mount Alexander diggings, and 8,000 licenses issued: the yield was still wonderfully large—“many parties, within a very limited period, secured forty, fifty, and even seventy pounds’ weight of gold.”* According to the government escort returns, it appeared that Eddy and Gill (five in company), sent to Melbourne 3,008 oz.—£9,024, raised in seven weeks; and D’Arcy and Co. (four in company), 2,222 oz.—£6,666, which they raised in eight weeks.

At Ballarat, 739 licenses were granted for December; but, before the end of the month, the number of persons at work was reduced to 200—who were all, however, stated to be doing well. One party, in two days of the same week, obtained ten pounds’ weight of gold. The secondary, or smaller gold-fields, were no longer visited, as persons were not satisfied with ordinary chances of gain or moderate remuneration for labour.

Instances have occurred of a labouring man acquiring gold to the value of £1,000 in a month, and others not “earning their salt” in six months. It was calculated, at the diggings, that out of every 100 men, ten made fortunes; twenty, first-rate livings—say £5 a-day, clear; forty made 30s. a day; thirty did worse than nothing: but then there was plenty of work for the unsuccessful miner, at 10s. to 15s. a day.

The sight of quantities of money in the streets, passing from hand to hand, and very lavishly expended, turned the most sober heads; many who had returned from Ballarat and other places unsuccessful, or unable to undergo severe toil, now hastened off to Mount Alexander, where the labour was comparatively trifling, and the return almost certain; and neither constables, boatmen, clerks, or any class of subordinate officials could be retained at their duty without largely-increased pay.

Towards the close of the year (1851), several of the public departments, police, post-office, &c., were completely abandoned by the subordinates; it was feared there would be no one even to take care of the

* Lieutenant-governor Latrobe to Earl Grey, 15th January, 1852.

Lunatic Asylum, and that its wretched inmates must be allowed to wander about at large. The lieutenant-governor asked the opinion of the leading public functionaries, and they recommended an increase in wages, varying from 50 to 100 per cent—which was done, and on account of the increased price of all commodities, and the difficulty of procuring servants at any price, the salaries of all the functionaries of government were largely augmented; this was readily accomplished, as the *increase* of the territorial or crown revenue for the quarter ending 31st December, 1851, as compared with the corresponding quarter of the previous year amounted to £69,253, and that of the general revenue to £10,711 = £79,964; of

this £25,481 was received for gold-licences, and the gold-escort, at one per cent., furnished £3,634. House-rent increased 50; furniture, 100; hotel and stable charges, 50 to 100; boat-hire, 50; and cartage 200 per cent. on previous rates. Imported manufactures, 30 to 150 per cent., according to the articles most in demand, such as clothing, boots and shoes, slops, hardware, spirits, beer, wine, and tobacco; the price of horse-shoeing rose 350 per cent., and water-cartage 240 per cent. per load.

The wages of labour and the prices of provisions rapidly increased. A comparison is thus given between December, 1850, and the end of 1851, by Mr. Childers, the immigration agent:—

Comparative Statement of the Rates of Wages and Prices Current at Melbourne for the Months of December 1850, and December 1851.—Wages and Salaries.

Trades or Callings.	Term or Quantity.	Rates in 1850, December.	Rates in 1851, December.
Shearers	Per 100	12s.	20s.
Reapers	Per acre	10s.	20s. to 25s.
Labourers	Per diem	5s.	15s. to 20s.
Ditto	Per week	20s.	45s. to 50s.
Artizans employed by founders, iron- mongers, factors, &c. . . . .	. . . . .	. . . . .	Increase 80 to 120 per cent.
Coopers	Per diem	5s.	10s.
Shipwrights	Ditto	6s.	10s.
Woolpressers	Ditto	3s. 6d.	7s. to 8s. None to be had.
Sailors	Per mensem	4l.	50l. to 100l. offered for the run to England.
Stokers	Ditto	12l.	20l.
Cooks (men)	Per week	20s. to 25s.	2l. to 3l.
Waiters at hotels	Ditto	20s.	2l. to 2l. 10s.
Ostlers and stable-men	Ditto	21s.	2l. 10s.
Men-servants in town	Per annum	25l. to 30l.	50l. to 70l. None to be had.
Ditto in country	Ditto	20l. to 25l.	35l. to 40l.
Female-servants . . . . .	. . . . .	. . . . .	Increase 25 per cent.
Porters	Per week	12s. to 15s.	25s. to 35s.
Salesmen, shopmen, clerks, &c.	Ditto	25s. to 35s.	2l. to 3l. 10s.
Clerks in the banks and mercantile houses, &c. . . . .	. . . . .	. . . . .	Increase 20l. to 50l. per cent.

Provisions, &c.

Articles.	Quantities.	Rate in 1850, December.	Rate in 1851, December.
Bread	Four lb. Loaf	5d.	1s. 4d. to 1s. 8d.
Butter	Per lb.	1s. 2d.	2s. to 2s. 6d.
Cheese	Ditto	8d. to 1s. 4d.	2s. to 3s.
Fresh meat	Ditto	1½d.	3d.
Salt meat	Ditto	1½d.	2½d.
Ham	Ditto	8d. to 1s.	1s. 6d. to 2s. 6d.
Bacon	Ditto	6d. to 8d.	2s.
Groceries, generally . . . . .	. . . . .	. . . . .	Increase 25 per cent.
Fowls and ducks	Per couple	3s. to 3s. 6d.	5s. to 6s.
Potatoes	Per cwt.	8s.	12s. to 15s.
Vegetables . . . . .	. . . . .	. . . . .	Increase 50 to 100 per cent.
Spirits, wine, beer, &c., retail prices . . . . .	. . . . .	. . . . .	Increase 30 to 50 per cent.
Tobacco	Per lb.	2s. 6d. to 4s.	7s. to 8s.
Confectionery . . . . .	. . . . .	. . . . .	Increase 50 per cent.
Fruit . . . . .	. . . . .	. . . . .	Increase 100 per cent.

There were at this period in Hobson's Bay thirty-four ships, varying in size from 400 to 1,200 tons, the aggregate burthen being 18,639 tons; the crews numbered 825 men, and their wages ranged from £2 to £9 per month; of these 417 men deserted. The amount of pay seemed to have little influence in inducing the seamen to remain: the *Sarah Ann*, of Adelaide, had a crew of sixteen men, at £9 each per month—thirteen deserted; the *Susannah*, of Hobart Town, whose crew (fourteen in number) had £4 a-month, was entirely abandoned; the *Zetland*, of Liverpool, burthen 1,283 tons, had a crew of thirty-six, at £2 15s. per month—twenty-eight deserted. The *City of Manchester*, 1,200 tons, lost thirty out of a crew of forty. At the above date there were twenty-four colonial vessels in the port of Melbourne; their seamen numbered 221, at wages varying from £4 to £8 per month, of these ninety-one deserted. The wages offered for any sort of sailor for the voyage to England was £80 to £100; but even at this rate few could be obtained. The harbour-master stated that even £180 per man had been in vain tendered for able seamen to navigate the ship home.* The moment a vessel approached the shore, every device was used to quit her. At night a man would purposely leap into the sea; the cry of "a man overboard" was raised, a boat lowered, the pretended drowning seaman was picked up, and the boat's crew pulled away for the shore. The *Rattler* went into Hobson's Bay to land one passenger, and lost eleven men by desertion. There was no water-police, and no effective measures taken by the local government to remedy the evil, who alleged that it was beyond their power to redress. The conduct of the population was, on the whole, excellent. The lieutenant-governor reported to her Majesty's secretary of state, that although "no inconsiderable number of restless and unprincipled characters gathered from this (Victoria) and the neighbouring colonies, bound by no tie of social order, had obtained a species of power"—yet "at the same time I may bear evidence in general terms to the good conduct observable up to this date at

the various workings."† Again in January (12), 1852, when adverting to the fact of the police in town and country having almost entirely abandoned duty (in Melbourne, out of forty constables, only four remained on duty after midnight on the 7th of January), the governor noted the absence of disturbance, at a time when some thousands had returned to the towns, flushed with success, to spend the Christmas, and when there were only forty-four soldiers in the colony.

THE gold proceedings at Victoria, as well as those at New South Wales, have now been detailed down to the close of 1851; henceforward, the diggings in the latter-named province were of subordinate importance to the yield of the Victoria fields, which opened auspiciously in 1852.

In January, a party of four men, found in *Canadian Gully, Ballarat*, a nugget of 120 oz. weight, said to be pure gold. The finders offered to sell the hole in which the treasure was obtained for £300, but there being some hesitation as to buyers, they went down into the pit again, and procured another nugget, weighing 76 oz.; a purchaser then stepped forward, and the lucky miners retired with their fortunes made.

Within a few hours of this intelligence reaching Melbourne, some hundreds of persons departed for the gold-fields, and a rise of price immediately took place in the labour market.

The Ballarat gold-field, which had been nearly deserted for Mount Alexander at the close of 1851, recovered its attraction in February, 1852—the extensive river-flat in advance of the *Golden Point* having been opened with every prospect of considerable success, the average yield to some parties being at the rate of twelve ounces per diem per man; whereas, previous to this new "digging," the average produce for many weeks to 200 steady workers, could not be estimated at more than eight or ten ounces per man monthly.

The progressive yield of the two principal fields, from the commencement of their respective operations, up to this date,‡ is shown to some extent by the weekly escort re-

the sagacious captain was saved much trouble and expense.

† *Despatch*, 19th December, 1851; in Parl. Papers 14th January, 1852, p. 64.

‡ The total yield of the Victoria mines, from about the 20th of September to the 17th of December, 1851, was carefully estimated at 10 tons 2 cwt. 82 lbs. and 10 oz., valued at 60s. per oz., = £730,242.

* An excellent device was resorted to by the captain of the *Statesman*, who marshalled his crew, gave them an outfit, and started them off for the diggings, in charge of the mate; they worked hard for a month—got little or nothing, and one morning all struck work—declaring, that "before the mast" was a thousand times more desirable than gold-digging: they gladly marched back to their ship, and

turns, from September, 1851, to March 31st, 1852:—

Months.	Ballarat.	Mount Alexander.	Total in Ounces.
September 30 . . .	121	—	121
October 2 . . .	247	—	247
" 8 . . .	2,298	—	2,298
" 15 . . .	1,830	—	1,830
" 22 . . .	2,708	—	2,708
" 29 . . .	2,337	228	2,565
November 5 . . .	4,719	965	5,684
" 12 . . .	3,480	—	3,480
" 15 . . .	2,737	6,443	9,180
" 26 . . .	1,745	10,588	12,333
December 3 . . .	2,886	13,783	16,669
" 10 . . .	2,906	23,650	26,556
" 17 . . .	1,302	18,192	19,494
" 24 . . .	779	10,077	10,856
" 31 . . .	216	10,598	10,814
	30,311	94,524	124,835
January 6 . . .	117	10,957	11,074
" 12 . . .	193	14,398	14,591
" 19 . . .	59	12,000	12,059
" 26 . . .	14	16,071	16,085
February 3 . . .	5	11,872	11,877
" 10 . . .	80	11,035	11,115
" 17 . . .	13	12,287	12,300
" 24 . . .	123	46	169
" 27 . . .	—	21,784	21,784
	604	110,450	111,054
To the 31st December	30,311	94,524	124,835
To the 31st March .	1,370	60,824	62,194
Total . . .	32,285	265,808	298,093

This gives a total of 298,093 oz., but the shipments for these months shows 563,471 oz.; thus:—

Months.	Gold.	Exported to	Gold.
	Ozs.		Ozs.
August, 1851. . .	18	London . .	429,955
September, — . .	—	Hamburgh .	3,411
October, — . . .	1,548	Sydney . .	122,584
November, — . . .	3,441	Hobart Town	1,483
December, 1852 .	140,128	Adelaide . .	6,038
January, — . . .	166,472		
February, — . . .	152,092		
March, — . . .	105,772		
Total . . .	563,471	Total . . .	563,471

In March, there were about 500 persons at Ballarat; and at Mount Alexander, within an area of ten or fifteen miles, at least 30,000 men, women and children. The favourite places of resort were *Forest Creek*, throughout its whole course to *Barker's Creek*, with *Friar Creek* and their converging valleys; and the *Loddon River* at the point of junction with these two

tributaries. The yield continued pretty much the same as in the three previous months—about two tons, more or less, per week; the success of miners varying considerably: during the month of January, a party of four men obtained in a single day, 28 lbs. of gold, value about £1,000. In the same month, a piece of solid gold was found, weighing 27½ lbs., with only a few minute quartz pebbles in the hollows. At *Spring Creek*, twenty miles to the southward from the Loddon; at *Mosquito Creek*, twelve miles east of Bendigo, and at *Wombat Hill*, fifteen miles from Mount Alexander, there were partial workings under license.

At first the workings were comparatively superficial, and the mining slovenly and wasteful in the extreme; in several places, however, it was found more profitable to dig thirty, and even fifty feet below the surface. Many of the steady and intelligent miners thus rapidly acquired wealth, and returned to their homes; the farming classes especially found it advantageous to secure their harvests, which were all very generally reaped throughout the colony. About 6,000 men left the diggings for this purpose, in the ten days preceding the 1st of January.

Although such a considerable number of the orderly and well-disposed part of the workers, who had a stake in the maintenance of peace, were thus withdrawn, leaving a large mass of motley and apparently reckless characters at the mines, yet their conduct was creditable to the British character. Lieutenant-governor Latrobe, addressing her Majesty's secretary of state on this subject, 2nd of March, 1852, says—

"I speak confidently, not only from official information, but from the unsought evidence of many competent and impartial observers of every rank and calling, quite unconnected with government, when I assure your lordship, that hitherto no serious outbreak or rejection of constituted authority has ever been attempted or taken place, and nothing that could fairly be construed to evince a disposition on the part of any number of the population at the workings to have recourse to self-constituted protection or favour the introduction of so-called "Lynch Law."

"24. With regard to the statements of the universal unchecked prevalence of crime and disorder at the workings, detailed with such effrontery and recklessness in the profligate public prints of this colony itself, or greedily retailed and commented upon for evident purposes in the New South Wales press, all I can say is, that they are not true, the greater part totally false, and in so far as there may be foundation for this or that statement or circumstance, so grossly exaggerated as to be unworthy of

credit. Your lordship will allow me to state, that viewing the position and character of no inconsiderable number of persons frequenting the workings, a far greater amount of crime might prevail without the government of the colony—circumstanced as it has been—being in any degree justly blameable. In such a crowd, one-half utter strangers to the other and to the colony, met together in a wild tract of broken, forested country, full of secluded hollows, honeycombed with hundreds or thousands of ready-made graves, under such strong inducements to cupidity, disorder, and crime, the imagination is free and unrestrained to picture the extent to which crime may, how improbable, prevail in secret without the possibility of discovery or chance of detection. Many a murder may take place, of the existence of which no evidence will ever transpire or record exist; but I can assure your lordship that whatever crimes may really be perpetrated, no indifference to it on the part of the authorities could have existed, and that no such general disorder and rejection of law and constituted authority as these statements would represent has ever been observable. On the contrary, notwithstanding the extraordinary circumstances under which the multitude finds itself brought together, the passions and temptations of the hour, the acknowledged insufficiency of the police force to oppose physical force to any really serious outbreak or general disturbance, the inability in every instance to afford prompt justice, the but partial carrying out of the regulations, which must be admitted as a grievance by the well-disposed, the occasional agitation got up by a knot of well-known advocates for change; and I may, lastly, justly remark, the evident disposition manifested from the very outset of a portion of the colonial press, for its own purposes, to induce political excitement, and pander to the passions of the mob, spread a spirit of disaffection, and induce a want of confidence in the measures of government by a systematic distortion of facts and of statements, pointing out, not only what the mob actually do or meditate, but what they might do. The orderly bearing and conduct of the great proportion of the people on the ground is undeniable, and the subject of surprise to all who have an opportunity of personally ascertaining the real state of the case.”*

As might be expected among a population of thirty thousand persons of all classes, living very irregularly, devoid of the ordinary shelter and comforts of civilized life, and during a very hot season, there was some low fever, dysentery, and inflammation of the eyes; but no disease of an epidemic or serious character prevailed. There was no want of food; but, excepting tutton (always procurable at a reasonable price) and flour, every other article had its cost enhanced, by 50 to 100 per cent., at the shops and stores established all over the encampment.

In April, no less than 19,988 licences were issued (of which 19,049 were for Mount Alexander), yielding £29,987 to the government in that month alone; and, had there been an effective police, many thousand

* Parl. Papers, 28th February, 1853, pp. 170—1.

more licenses might have been secured. The population in the Mount Alexander district, including Bendigo, was roughly estimated at 35,000—including about 5,000 women and children.

The want of water caused a very wide dispersion of the miners; much of the auriferous soil had to be carted five, eight, and even ten, miles to be washed.

During this month the Lieutenant-Governor again visited all the gold-fields in Victoria, and in his report to her majesty's secretary of state,† says:—“I may bear my decided testimony to the good order which pervades in every quarter, and the disposition evinced by the great mass of the mining population to respect the law and conform to the regulations.” With evidence of such excellent conduct, it was judicious policy in the local government to appoint medical officers to reside at Mount Alexander and Bendigo, for the benefit of the police and other officials: also to act as coroners, and, with the aid of juries, to inquire into the cause of all deaths taking place on the gold-fields, either from natural or accidental causes, as well as from violence, should such occur. Eight clergymen (two of each persuasion) belonging to the churches of England, Scotland, and Rome, and of the Wesleyan body, were paid each from the gold-fund £300 per annum, to provide for the due observance of the ordinances of religion at the gold-fields, and the celebration of public worship on the sabbath. With a view to the public safety, the governor of Tasmania despatched to Victoria, at the urgent request of Lieutenant-Governor Latrobe, 130 of the military pensioners who had been sent from England in charge of convicts. They proved a useful addition to the small body of troops then in the colony, in mounting guard at the gaols, public depôts and gold-stores: the expense was borne by the local revenues.

The population of the colony rapidly increased. In one day (27th of April) no less than 2,400 new arrivals appeared in Hobson's Bay; during the last week in April, the number was 4,000. Between the 1st of January and 30th of April, 1852, the immigrants were 21,385—viz., 17,177 males, 2,473 females, and 1,736 children.

It now became a well-established fact, that the product was in proportion to the number of persons engaged in the operation. Mount Alexander had the largest population,

† See *Despatch*, 10th May, 1852; Parl. Papers.

and the quantity of gold transmitted from thence by government-escort only between the 2nd of March and 26th of April, inclusive, was 128,913 ozs. = £386,739. For fifty-five days, the transmission by government was at the rate of upwards of £7,000 a-day.

In May and June—notwithstanding the setting in of violent rains in the first-named month—the yield was extraordinarily great; from the 5th of May to 28th of June, the escort brought from Mount Alexander 176,580 ozs.; and from Ballarat, for the same period, 5,011 ozs. = 181,591; valued, at £3 per oz., at £544,773.

The heavy floods in the rivers and creeks caused considerable changes in mining operations, and dispersed the diggers in search of new fields. In opening a new gully at Bendigo, 44 lbs.'-weight of gold were obtained by one party in two-hours' labour: another party regularly obtained 2 lbs. of gold per diem for six weeks, near Friars' Creek.

In April, gold was found in a group of granite-hills about 270 miles' distant from Mount Alexander, 15 miles south of the river Murray, at Albury, and near the river *Ovens*, or *Burwang*.

At the *Eureka* diggings (nine miles from Ballarat Proper), which were discovered in May and at the beginning of June, the average daily earnings were three ounces each man. At other workings, owing to the unusually severe rains, one ounce was a fair average, though there were instances of parties raising thirty ounces and upwards in a day. During the third week in May, a terrific storm occurred and continued for several days; the roads were completely broken up by the floods, and several important bridges carried away. Many hundred drays and carts scattered along the line were brought to a stand-still. The weekly escort *en route* from Mount Alexander to Melbourne with 31,000 oz. of gold were overtaken by the tempest; the guards were unprovided with shelter, and for days indeed almost without food, but they manfully stood by the gold cart for seven days and nights, and finally brought it by a circuitous route in safety to Melbourne. The price of provisions rose to an unprecedented height, as carriage upon the main lines of road became an affair of great difficulty.

During May and June, wages at Mount Alexander were—for tent-keepers, 10s.; for common labourers, 10s. to 16s.; carters,

22s.; carpenters, and blacksmith, 25s. to 30s.; and hire of a bullock or horse dray, 80s. to 100s. a day. The charge for a ton of goods from Melbourne to Mount Alexander and the other diggings—70 to 90 miles—which was at first £20, rose on May 15th, £55, and on June 26th, £140. Flour increased from £7 10s. on May 8th to £23 a bag on June 15th; other articles in proportion. The cost of conveying flour to Mount Alexander was estimated at £12,000 per month. Government paid at Bendigo 10½d. a lb. for hay for the police horses, 65s. a bushel for oats, 16s. for 20 lb. of bran; for shoeing a horse, 40s.; and bait for a night, 35s.

The enhancement of price by this enormous cost for freight is shown by a correspondent from Melbourne, dated July 30th, 1852, and who says, that he sold at the diggings—flour £16 a bag—for which he had given £3 at Melbourne; sugar, which had cost him 3d. per lb., he disposed of for 1s. 6d., “and so on.” Two horses, a cart, and harness purchased for £80, to convey the goods, were sold when the work was completed for £120. A punt on the river, near Geelong, charged 9d. for each passenger, and 6s. for a bullock team, to be conveyed a distance of but a few yards.

At Melbourne, wages of artizans ranged from £4 to £6 a week with lodging and rations. Even unskilled labourers received on shore 50s. to 55s. a week with rations, and on board ship still more. Waiters at hotels were remunerated with £4 5s. to £6 a week with perquisites. Postmen had their wages increased from 6s. to 10s. a day. At the *Victoria Registry office*, Melbourne, the wages offered were:—

“Married couples, as house servants for country hotels, &c.; can have engagements at 65l. to 70l. per annum, with rations; shepherds, 38l.; hut-keepers, 30l.; bullock drivers, 50l., or by the week, 1l. 10s., and on the roads from 3l. to 4l.; farm servants, 50l. per annum, and 1l. 10s. by the week; bush carpenters, 2l. per week; cooks for inns, 1l. 10s. to 2l. per week; general servants, 40l. per annum, all including rations. Maid-servants can have engagements at 24l. to 30l., house-maids at 23l., nurse-maids, 18l., cooks and laundresses, 24l. including rations.”—The landing charges for goods at Melbourne was frequently six or seven times the cost of freight from England, so inordinately had everything been enhanced.

A local writer thus comments on the state of things at this period:—

“Next to an efficient police force an importation of female servants is urgently wanted in Victoria.

Ladies must do their own household work, or be exposed to the double annoyance of paying high wages and having to put up with a great deal of incompetence. Men have flocked into the colony by thousands, but the women of England have been less migratory, and as successful diggers usually get married as fast as circumstances permit, the few women who arrive are usually soon removed from servitude and placed at the head of some rough establishment at the diggings or in the bush. We are assured that the splendour of a digger's wedding is sometimes rather startling. Young Irish orphan girls, who scarcely knew the luxury of a shoe until they put their bare feet on the soil of Victoria, lavish money in white satin at 10s. or 12s. a-yard for their bridal dresses, and flaunt out of the shop slamming the door, because the unfortunate storekeeper does not keep the *real* shawls at ten guineas a-piece. What a blessing for our London shop-keepers if they could but catch such customers!"

Flour was £25 a ton; the 4-lb. loaf, 1s. 4d.; beef or mutton, 6d.; pork and bacon, 2s. per lb. Cauliflowers, 1s. each; cabbages, 1s.; turnips, 4s. per dozen; carrots, 3s. per dozen; parsnips, 4s.; onions, 4d. per lb.; potatoes, 12s. per cwt.; new ditto, 6d. per lb.; green peas, 1s. 3d. per quart, unshelled; turkeys, 20s. each; geese, the same; ducks, 12s. per pair; fowls, the same; eggs, 3s. per dozen; ham, 3s. per lb.; milk (and water), 1s. 4d. per quart; one "pennorth" of watercresses, 1s. 6d.; radishes, 1s. per dozen; "three-pennyworth" of greens, 2s.; tea, 1s. 6d. to 2s.; sugar, 3d. to 3½d.; coffee, 1s. 6d.; English cheese, 2s. 6d.; butter, 2s. 6d. to 3s. 6d.; potatoes, 2d.; tobacco, 6s.; candles, 8d. to 1s. 6d. per lb. Whiskey, 5s.; gin, 4s. 6d.; brandy, 17s. 6d. per gal; port, 25s. to 40s.; and bottled beer or porter, 12s. to 15s. a dozen. At hotel—board, 10s; bed-room, 2s. 6d. a day. Keep of horse, 50s. to 60s. a week. A small dwelling-house, formerly worth £20, would now sell for £150. Land, like everything else, brought enormous prices. Shop frontage in the best situation in Melbourne, with a depth of 30 feet, sold for £210 per foot. Water-carriers were the most money-making people, except the proprietors of the lowest class of public houses—for the "good-will" of which thousands of pounds were given—as the sale of spirits and fermented liquors was enormous.

In June, the population scattered within the extended limits of the gold-fields, over the adjacent country and along the great lines of thoroughfare, was estimated at between forty and fifty thousand, (including women and children,) and the number of licenses issued 25,734. The governor bore

the following testimony as to their conduct, in a despatch to the secretary of state (No. 76), July 8th, 1852:

"Nothing can better show the power of the law, and the willingness with which the majority seek, by ready compliance with the regulations, to come under its protection, than the fact, that, under circumstances of such comparative confusion, and of so much temptation and excitement, and with such seeming disproportion in the means employed to ensure obedience, so large a number of licences are recorded. On all hands it must be considered that the population of the workings, taken as a whole, are as orderly and well-disposed as can be met with in any part of the colony. The comparative rarity of instances of grave outrage or of capital crime is a subject of great gratitude to God."*

Notwithstanding the severe hardships endured, the season was not generally unhealthy; low fever, dysentery, and diarrhoea prevailed to some extent, which was not surprising, considering the imperfect shelter and irregular diet and drink of the mining population.

The wintry rains of June, July, and August, caused great impediments to the miners, and materially diminished the means of transit; nevertheless, during the last week in July, Mount Alexander sent down to Geelong, 22,402 oz.; on the 3rd of August, to Melbourne, 18,145 oz.; and, on the Monday and Thursday following, 71,145 and 18,174 oz.; making a total of 107,384 oz., from one locality, in the first seven days of August. This formed only a part of the result of all the diggings. On a rough calculation it was estimated that their yield, during the month of August, was 246,000 oz.

Many immigrants crossed overland from Adelaide to the diggings; they are described as enterprising, honest, sturdy, hard-working men; and to these qualities, in addition to the mining skill of several, their extraordinary good fortune was justly ascribed. Gold, to the value of £6,000 (150 lbs.-weight), was obtained in one day in July, between breakfast and dinner, by a party of Adelaide miners, four in number, who had gone "prospecting" on a flat between Adelaide gully and Wattle-tree flat, on the road leading from *Forest's* to *Fryer's Creek*. Other holes were immediately sunk, closely adjoining the lucky *claim*, and here the daily yield, for some time, averaged 6 to 9 lbs.-weight: many procured 9, 12, and 20 lbs.-weight in *pockets*; and, in August, 7 tons were lying at Adelaide gully, for want of horses to convey it to Melbourne.

At *New Bendigo Flat*, Forest Creek,

* Blue Book, 28th February, 1853, p. 210.

during the same month, one party took 12 lbs. from one hole; and four Germans gained 21 lbs. in a week. At *Donkey gully*, in the upper part of this creek, 100 oz. were procured in one week, and many of the deserted holes in this vicinity were being re-worked and "doing well." A set of Cumberland men, who worked hard, and were very unfortunate for two months, at last hit on a spot where they procured £180 worth of gold from one hole. In another place they obtained at the rate of £50 worth from each square foot of area. The Bendigo hills were at this time covered with snow, which had fallen around, to the depth of seven feet, spoiling, by the floods, the labours of the people.

The skilled Cornish miners introduced an improved mode of working. At the *Eureka Diggings*, in *Boninyong gully*, the miners made circular holes, fifty feet deep, and obtained a steady yield; occasionally there were large "finds;" the gold was very beautiful and pure, but more ragged than that of Ballarat. One nugget found weighed 102 ozs., freed from all impurities: it resembled in shape a cramped hand, and £330 was offered for it. The diggers, at the end of August, were established here in commodious tents, and huts and stores had been formed.

The encampment at Mount Alexander was a singular sight; each tent, separated from its neighbour by an interval of twenty yards, and distinguished by various marks sticking out of the top—viz., flags, handkerchiefs, old hats, boots, shoes, bones, &c.—whatever, in fact, would enable the owner to recognize his home. At night, it might be supposed that a battle was raging, from the incessant discharge of six-barrel revolvers and all sorts of fire-arms, by the inmates, in order to intimidate pilferers, and to show that the inmates were on the alert. Should a thief be shot, notice was given to the police, and commissioner; an enquiry and depositions followed, and then the body of the culprit was buried in the nearest hole.

Every day added largely to the population. I find in the returns as many as 4,283 persons arriving at Melbourne during the last week in July. I hope to be able to furnish a periodical statement of immigration in the appendix.

As before remarked, the temptation to seamen to desert from their ships at Melbourne was irresistible: the majority of

masters made up their minds at once as to the hopelessness of restraining their men, or of endeavouring to enforce a strict observance of their original engagements. Fair words or the application of coercive measures failed in securing more than the discharge of the cargoes of their respective vessels; and, when this was accomplished, most masters resigned themselves to the exigencies of their position. Some not only released the sailors from their articles of agreement, but good-humouredly assisted in making up parties for the gold-fields, hoping that their men, when disappointed, (as was the case with the *Statesman*), might return, or that, when ready for sailing, they might be able to collect a crew for the voyage.

There was a harbour-master, marine-magistrate, and water-police at Melbourne; but no reliance could be placed on the latter: the men were constantly changing, and open to bribery, and recruited from the very class they were required to coerce; some deserters and offenders were apprehended, convicted, and punished; but their number bore a small proportion to that of the runaways. The great disparity of wages between the European (£2 to £2 10s.) and colonial (£10 to £12 a month) shipping naturally tended to increase the number of absconders from the former: and, when a few coasting trips were made, an able-bodied seaman, on returning to Melbourne after the departure of his original ship, could readily obtain £50, and, in some cases as high as £70, for the run to England—a voyage of 90 to 120 days. The presence of a ship of war in the harbour would, at this critical period, have been of great service to the local government and mercantile interests.

On the 9th of August the number of vessels in Hobson's Bay was 48; the total number of crews on board, at the period of their arrival, was 1,107; the number on board on the above date was 435. But this very inadequately shows the desertions, as many of the colonial traders retained their crews. On examining the state of the European vessels, I find there were 22 ships from the United Kingdom, whose crews, on arrival, mustered 697: on the 9th of August, there were on board only 228 remaining. Two of those vessels had arrived in August, eight in July, five in June, and others at more distant intervals; some, indeed, had been six months "waiting for hands"—all having deserted. Of forty men

on board the *Duke of Bedford* (900 tons) when she came into port (February 4th, 1852), thirty had deserted before the 9th of August. The proportions varied in other vessels, seldom one-half remaining—more frequently one-third or one-fourth; and, in a few cases, but one or two of the crew continued faithful to their engagements.

Between January and August, 1852, 110 vessels cleared from Melbourne, who were short of their full complement of crew to the number of 962. From the 1st of April to 31st of July, only twenty-four deserters were recaptured: ninety-four were imprisoned for refusal of duty; and but eighteen returned to their duty.

There was no room in Melbourne or Geelong for the immense numbers who flocked to the colony, and from 5,000 to 6,000 people were obliged to live in about 500 tents at a spot denominated *Canvas Town*, in the vicinity of Melbourne, where the local authorities exacted a rent of 5s. a week for each tent, and prohibited the placing of even a few boards on the damp ground. A sort of *Rag Fair* was established, where the emigrants might sell their little stock or surplus of clothing, bedding, or books, and anything they possessed which might enable them to live; but the local government prohibited this, opened a "rag fair" on its own ground, and charged £1 a week for a small standing. Within a few days after this harsh proceeding the Market-house of Melbourne was burnt, as is supposed, by an incendiary, and the city itself had a narrow escape from a conflagration similar to those which occurred at San Francisco and Sacramento.

Here it may be useful to advert to some features characteristic of a population suddenly enriched. No language would convey a full idea of the extravagance and waste of money by men, who had never previously been possessed of more than a few shillings at a time, but who now found themselves the owners of thousands of pounds. The weddings at Melbourne afforded opportunities for the largest profusion; not only in the purchase of the richest silks, satins, velvets, feathers, ribbons, mock jewellery, &c., for persons, many of whom had been servants the week before, but in lavishing wines of the most expensive kind, and wedding-cakes, which cost from £5 to £10 each, on all who would partake of the wild hospitality of the bridegrooms. Several pounds would be paid for a two-horse fly to drive

a wedding party, all mad with drink, about the town for a few hours—the "cabbee," horses, and even the wheels of the vehicle being decorated with bridal "favours," in the shape of costly white and bright-coloured ribbons. These weddings not unfrequently cost from £300 to £500.

The most absurd stories are related by credible witnesses of these extravagancies; for instance, if £4 were asked for a wedding-cake of six or eight inches diameter, the purchaser would not unfrequently throw down a £5 note and snatch up a handful of gingerbread-nuts as the "change:" instances are recorded of a bank-note being chumped up in a sandwich to show contempt for money. In the hotels or inns "diggers" struggled, even to blows, who should pay for wine in the public rooms to be offered to all comers, strangers or otherwise. On one occasion, two diggers ordered 100 *noblers* (glasses) of brandy to be placed on the green near Melbourne, and invited every one who passed to drink. Crowns, half-crowns, and nuggets were showered from the boxes on the boards of the theatre, for tawdry actors, whenever some clap-trap sentiment was uttered.

The more dissolute gave their gold to the landlord of a low "pot-house," with the intention to drink it out, and were soon told the score was finished—they then went back to the gold-fields as poor as when they arrived in the colony. A large amount of money deposited in the joint-stock and savings' banks (for which the depositors frequently refused a pass-book, under an impression that it was something equivalent to a convict's ticket-of-leave), will never be claimed, as the owners drank themselves to death, perished from accident or violence, or died of disease and without any known heirs. Those who saved their earnings to invest in land or houses, or in business, were the minority; but they soon acquired an independence for life, especially by the construction of tenements—as rents were asked for mere hovels which would not have been demanded for handsome mansions in any of the European capitals.

That the heinous vice of intemperance—the parent of innumerable crimes—prevails in some of the large towns of Australia is undoubtedly too true, but the sudden acquisition of wealth, the absence of those religious and moral restraints which induce men to place a curb on their passions, and

the want of that christian instruction, accompanied by literary institutions, which supply pure sources of pleasure, may explain the causes of this destructive, debasing, and unmanly vice.* Yet, when we see at the present moment, that the king of Sweden and the Lutheran clergy of that country are unable to check the use of intoxicating liquors which is rapidly destroying an entire nation, whose consumption averages for each man, woman, and child in the kingdom six gallons, or thirty-six bottles of ardent spirits—and that in Scotland the adult male population are estimated to consume eleven gallons, or sixty-six bottles annually,† we should hesitate before casting indiscriminate censure on the Australian. It is utterly impossible that there should have been such continuous industry at the gold-fields, if drunkenness had been the prevailing habit of the labourers. Since writing this, I observe that Mr. Westgarth, who visited Mount Alexander and Bendigo in 1852, adverts to the vigilance of the police in checking illicit grog-selling, every one caught doing so being fined £50, of which sum half went to the informer; and he adds, “we reflected with satisfaction that we had not noticed a single drunken man upon the diggings; and we learned afterwards that this sobriety, although not entirely without exceptions, was sufficiently general to have become quite a proverbial feature of the gold-fields.†”

That inebriety occurs extensively in Sydney and in Melbourne—as it does in London, Liverpool, Dublin, and Glasgow, is quite another question: yet, while admitting such to be the case, there is a hope of amendment. Boston was, not long since, conspicuous among the New England states of America for drunken-

ness: Channing and other good men deplored the evil, and struggled to implant a religious principle, which, with the divine blessing, can alone eradicate this seductive vice. In 1851, I dined with the mayor, corporation, and principal citizens of Boston, at Old Faneuil Hall, on the 4th of July, at the annual commemoration of the “Declaration of Independence.” About one thousand persons sat down to a sumptuous entertainment, which would not have disgraced the banquetting-room at Guildhall, London; but there was not a drop of wine, beer or spirits on the tables, before, during, or after dinner, and there was no want of festivity, or of *post prandial* eloquence.

At the *Irving House*, New York, where about 400 persons daily dined, I observed that no wine was drunk, but by a few English travellers. The same sobriety was noted in other parts of the “Union,” at hotels, at private houses, and on board the steam-boats; and I was assured that this remarkable national change had taken place within the last few years. There is, therefore, a hope that the Australians, who have several points of character in common with our trans-Atlantic brethren, will imitate their good example in this respect—and cease to put an enemy in their mouths to steal away their brains; and what is of infinitely more consequence, to destroy their sense of responsibility as immortal beings.

To return to our more immediate subject:—A great object of attraction was the gold-brokers’ shops, where large glass vases were to be seen filled with the “dust,” nuggets of a pound weight and upwards, placed separate or intermingled with rolls of bank-notes and piles of sovereigns, all reflected by a mirror; the value in the window being not unfrequently from eight

* The *London Times* of 15th December, 1853, has a letter from an evidently well-informed correspondent who thus expresses himself on the prevalence of this fearful vice in England at the present moment:—“So intolerable is the lust and craving of those who have been guilty of habituating themselves to the use of the unnatural stimulus of ardent spirits that, as we sometimes see, there is nothing they will not sacrifice—wife, children, mother, father—all and everything—to appease their physical and mental agonies, nervous irritation, remorse, shame, and conscious degradation; and there is not a reclaimed drunkard but will tell us that, under these horrid sufferings, if they were certain of being the next moment consigned to the flames of endless torment, they must and would have the fatal draught; for their state is a hell, beyond which they can conceive of nothing else equal, much less greater. There is no magic, no mysterious ‘portent’ in these dread-

ful crimes—it is the simplest possible case of cause and effect. Gin and crime! separate them if you can. The awful vice of drinking ardent spirits is, in spite of our prosperity, dragging down a very large proportion of our population into the depths of physical, moral, and social degradation and misery, the reaction of which will one day come with fruitful, but retributive vengeance, upon our highly-favoured but gin-stricken country. Do our ‘strikes’ really arise from the want of the means of subsistence, apart from the money spent in gin-drinking—apart from indulgence in that damning vice which year after year spreads itself wider and wider, and increases in intensity from generation to generation.”

† A large proportion of this allowance is consumed by women of the poorer class, who drink too generally whenever they can get the poison.

‡ *Victoria*, by William Westgarth, late member of Legislative Council. Edinburgh, 1853, p. 237.

to ten thousand pounds. The tricks, fraud and robbery practised by some of the gold-brokers, enabled them to acquire rapid fortunes, at the expense of miners, who knew nothing of reading, writing, or arithmetic. An eye-witness thus describes a not unusual scene:—

“A digger goes into one of these offices with his bag of dust and nuggets, which the broker requests him to empty on a large sheet of white-brown or other large paper; he then begins a vigorous ‘rousing’ with his fingers and a magnet to extract the ironstone from among it, and, a good deal of blowing and shaking having been gone through in a careless off-hand manner, he empties the lot into the scale. ‘Seven and four is eight, eight and three is eleven, eleven and four is fourteen; fourteen ounces, four pennyweights and a-half, at 3*l.* 7*s.* an ounce, is 43*l.*; there’s a check, sir.’ Now, all this shaking, &c., is to make a portion of the gold pass through two nicks each in two sheets of paper. When he takes it to put the gold into the scale he shifts the two sheets, so that the nicks are no longer over each other, and consequently cannot be seen, even if the seller has any suspicion. Sometimes, after shaking and blowing the gold in the above manner, he offers 2*s.* per ounce less than the digger can get anywhere else, who of course declines selling, and goes away with an ounce or so less than he came with. Some never buy an ounce, but have a pound or two to sell at the end of a week. Some scales have the beam divided unequally, so that it takes a quarter of an ounce to turn the scale. If one half of the beam is the 16th of an inch longer than the other it will take this. The way to beat them at this work is to reverse the gold and weights from one scale to the other.

The old adage, “all is not gold that glitters,” proved true even at Melbourne. Considerable quantities of the precious metal, largely alloyed, and of brass nuggets electrotyped, were “manufactured” at Birmingham for Australia. One party is reported to have made £100,000 by this nefarious transaction. A joint-stock bank lost, it is said, £50,000, by its dealings in the “Brum-magem pinchbeck.”

The activity of trade was remarkable; the entire population of Melbourne, excepting the officials, was actively engaged in buying and selling, and whether as vendors or vendees, realised excessive profits. Large fortunes were made in a short time by store and shop-keepers, and active and discreet gold buyers were equally successful. Two or three grocers in Melbourne were known to be making from £25,000 to £30,000 per annum. Many butchers became rapidly rich, and bakers did a large amount of business, as did also shoe-makers, tailors, linen-drappers and milliners. An itinerant knife and scissor-grinder (the first seen in Victoria), and a locomotive cobbler, made

each at the rate of £400 or £500 a-year. The owners of waggons were, to use a common expression, “coining money.” During six months of winter and rain in 1852, no less than £750,000 was paid for the mere carriage of the necessaries of life (excluding meat, supplied from the squatting stations), from Melbourne to the northern gold-fields, where a tent full of stores was only second to a tent full of gold. Flour, which cost at Melbourne £24 a-ton, sold at the diggings at the rate of £200 a-ton; the rate of carriage having risen successively, as the rains set in, from £10, £20, £80, £100, £120, to even £150 per ton. The newspapers afford an illustration of general auctioneering. A copy of the *Melbourne Argus* (a daily paper of fifty-six columns), contains 650 advertisements, many of them very long. Among the more prominent might be noticed sales of—mining boots, mining tools; cradles, picks, hoes, shovels and prospecting pans; iron houses and canvass tenements; dresses of every possible variety and price; piano-fortes; jewellery; arms, offensive and defensive; playing-cards and dice; saddlery, dressing-cases, musical snuff-boxes, perfumery, silks, satins, laces and embroidery; terra-cotta figures and bronzed groups; patent medicines; furniture; ironmongery; wines, beer and spirits; animal, vegetable and piscatory food; ship chandlery; four-in-hand mail-carts—and an innumerable list of other articles.

Notwithstanding the arrival of five to six thousand emigrants monthly, there was still an enormous demand for labour; but in a country, where if a man will not work neither shall he eat, there was of course distress—among the so-called “gentlemanly”—no capital—no labour people; but for the true manly spirit, that disdained to feed on the toil of others, and considered begging a disgrace, there was no want of remunerative employment. Here is a specimen of what gentle blood and right feeling will induce a properly-educated Englishman to do, rather than seek eleemosynary aid; the writer, after paying all expenses, found himself on the sandy beach of Port Phillip—moneyless, houseless, even tentless—an awkward “fix,” as the Yankees would term it. He raised £9 10*s.* on some eye-shades, bought a share in a boat, and obtained a license as a waterman, to land passengers and goods from the ships in harbour, and was not above doing anything to pick up a shilling, such as carrying a box, go of an errand, and help to

dig the foundation of a house. But duck shooting, which had been a pastime in England, here added to his income; and the mode in which it was accomplished is thus pleasantly described in a letter to his friends in England, from his "tent and home on the sandy beach of Port Phillip:"—

"I start off in the afternoon for one of the numerous lagoons, situated from five to ten miles off, and take with me on my back, besides my gun, a blanket, hook-pot, pannikin, tea and sugar, bread, &c. On my road I often get stuck in a bog or lost in bush; but, *nil desperandum*, on I go, and at length reach my destination. At sunset I take my station in some thick reeds—perhaps up to my hips in mud and water, and there await the evening flight of the ducks, teal, black swans, &c. At last, bang! bang! goes old Joe Manton; and splash, splash, tumble the ducks into the lake. Then for an hour its load and fire, and then gather together the dying and the dead. I now try and find out a soft place under some friendly gum-tree, light a fire, make a cup of tea (when I was on board ship I thought I should become a solid lump of 'plum duff'; now I really believe I shall be converted into a huge teapot, for I drink tea by the quart—not the cup)—roll myself in my blanket, d— the ants and mosquitoes, and off to sleep. Up again in the morning before the sun, take my place in the rushes, see the ducks turn out to wash their faces, and give them a hearty salute; after which, pack up and away to Melbourne, call at the clubs and hotels, and sell my ducks; and if I fail there, its 'Duck, O! Wild duck! Widgeon or Wild-fowl!' in the streets; and the best of all is, this kind of sport pays at 18s. a-pair for ducks, 20s. a-goose, 5s. and 6s. per pair for teal—a good night's work tells up." Fishing before sunrise was also profitable, as 20s. a dozen, large and small, was the price. The writer then adds, "Now, your poor, proud man won't do this, because, faith, he never did such a thing in England, and its so low to sell ducks, and therefore he starves, and nobody pities him, and he either turns shepherd in the bush or works his way home again as a ship's-steward."

Subsequently he adds,—

"For the working-man this country is the finest in the world, and he is sure of a fortune if he does not take to 'nobblers' (small glasses of brandy or rum.) Drunkenness is the very curse of the country. Tell any young man you know who thinks of coming here to think well before he leaves England, and ask himself if he can submit to work like a common labourer, or act as a porter or shopman, sleep under a tree, and put up with every sort of hardship and privation. If so, let him come; if not, for God's sake, let him stay at home. Thousands of gentlemanly young men are next to starving, and would gladly return. I fear the finding of the great nugget at Ballarat will cause another rush from England. I hope not, for none others are wanted here but workmen. I start, I hope, for the mines on Thursday. I don't think you would know me in my present rough dress, long beard and moustachios, and sunburnt appearance. I expect after six months at the diggings to return as yellow as gamboge and dry as a mummy, as is the usual appearance of the diggers. Had I brought a book on electro-biology out with

me and some discs, so as to get up a lecture, I could have made a fortune. As it is, knowing something about it, I am pressed to give a lecture. I can get an engagement as comic singer at concerts at 6*l.* per week, and have been advised to accept it. If I find the diggings a failure I think I shall accept the offer."

But amidst all the trafficking and knavery—the wealth-getting, as well as the struggling for existence, there was some romance: here is an account of a young, gentle-born, and highly-educated lady, who, with an only brother, were suddenly deprived of all the luxuries of life, and left orphans with only £300, as the wreck of large expectations. The brother had passed through college with credit, was a poet, as well as a bold huntsman; the sister had learned French and German, was a fair musical composer, and had written ten chapters of a novel, but broke down in her story from being unable to get her heroine out of a terrible scrape. They were both called on at a moment when their time was being pleasantly but not profitably spent, to fight the stern battle of life, and to cast aside romance for reality. Possessed of health and energy, and with a strong and enduring attachment for each other, they resolved, with their sole remnant of so much prosperity and so little prudence, to use the £300 as a means of prosecuting their fortunes together, and along with some equally respectable, but impoverished friends, in Australia. The heroine felt it would be imprudent to accompany her brother and friends to the diggings in her own proper costume and character, and she thus describes the change which took place, and the results:—

"I cut my hair into a very masculine fashion; I purchased a broad felt hat, a sort of tunic or smock of coarse blue cloth, trousers to conform, boots of a miner, and thus parting with my sex for a season (I hoped a better one), behold me an accomplished candidate for mining operations and all the perils and inconveniences they might be supposed to bring. I could not bear to be separated from Frank, and we all felt that I should be safer in my male attire than if I exposed myself to the dangers of the route and residence in my proper guise. We have now been nine weeks absent from Melbourne, and have tried three localities, at the latter of which we have been most fortunate. We are near water (a first-rate article), and our tent is pitched on the side of as pretty a valley as you could wish to visit. I have for myself a sort of 'supplementary canvas chamber,' in which I sleep, cook, wash clothes—that is, my own and Frank's—and keep watch and ward over heaps of gold dust and 'nuggets,' the sight and touch of which inspire me when I grow dull, which I seldom do, for I have constant 'droppers in;' and, to own the truth, even in my palmyest days, I never was

treated with greater courtesy or respect. Of course, my sex is generally known. I am called 'Mr. Harry' (an abbreviation for Harriet); but no one intrudes the more on that account. In fact, I have become a sort of 'necessity,' as I am always ready to do a good turn—the great secret, after all, of social success; and I never refuse to oblige a 'neighbour,' be the trouble what it may. The consequences are pleasant enough. Many a 'nugget' is thrust on me whether I will or no, in return for cooking a pudding or darning a shirt, and if all the cooks and sempstresses in the world were as splendidly paid as I am, the *Song of the Shirt* would never have been written, at all events. My own hoard amounts now to about 10 lb. of gold, and if I go on accumulating, even the richest heiress in my family in former days will be left immeasurably behind. Sometimes, when I have a few idle hours, I accompany Frank and his comrades to the diggings, and it is a rare thing to watch the avidity with which every 'bucket' is raised, washed, examined, and commented upon. Wild the life is, certainly, but full of excitement and hope; and, strange as it is, I almost fear to tell you, that I do not wish it to end! You can hardly conceive what a merry company gather together in our tent every evening, or how pleasantly the hours pass. Tea and coffee we have in plenty, for every one brings a hoard, and milk we manage to obtain, for among us we have imported two cows, which cost us about 50*l.* each, but that is a mere trifle. Cake of various kinds I manufacture, thanks to old Betsy D—for teaching me; and as for liquor, we sometimes have a little wine, brandy, or arrack, and sometimes not. And then we dance to the music of a German flute, played by a real German, or we sing glees and quartets, or talk of Moore, Byron, Burns, Goethe, 'Shakspeare and the musical glasses,' &c., until midnight, and sometimes long after it. As for suitors, I have them in plenty, and not despicable ones either, I assure you."

In September the lieutenant-governor reported the population at the gold-fields as about 50,000 (comprising 25,000 licenses), and added that "few cases of serious disorder (crime) have been recorded, and it may be questioned whether they exceed, if they even equal, the number which might be found to exist in the same amount of population engaged in more settled pursuits." In a quarrel between a party of Irish and others, a leader of the disturbance was killed; but order was immediately restored, and a coroner's jury returned a verdict of "justifiable homicide." Escaped convicts, and other dangerous characters from Van Diemen's Land, and some deserters from the troops, caused the formation of gangs of bush-rangers, well mounted and armed, who committed various robberies on the outskirts of the gold-fields, on the main roads, and even in the suburbs of Melbourne. Not unfrequently the robbers tied their victims to a tree, and left them to perish or to the chance of some passing traveller hearing their cries. Some-

times the miners, who were generally well-armed, exchanged shots with the robbers, and beat off their assailants. When the thieves were captured, they frequently managed to escape, either through the negligence or cupidity of an ineffective, inexperienced, and ill-remunerated police.

A description of an attack by bush-rangers (16th Nov.) on a party of two overseers, three carters, and a Mr. Wryghte, proceeding with some drays, and valuable rams, sent from England to the station of a public company on Edward River, is thus given:

"Nothing of moment disturbed the progress of our journey until we had reached about twelve miles from Maiden's Punt (on the river Murray.) We halted for refreshment, and while in the act of procuring it we observed, about fifty paces behind us, a party of five mounted men riding towards us at a reckless pace, which immediately roused our suspicion as to their character. We had, however, no sooner done so than they had ridden into the midst of us with a brace of revolvers in each of their hands. The first words that passed between us were an inquiry, from him who appeared to be their leader, of how far we were from the next punt; but before the question could be answered, a demand was made upon Mr. Wryghte to drop his gun (which he held at the 'order'), and before it could possibly be complied with one of the ruffians shot him, aiming, as I conceive, at his breast; but in consequence of the uneasiness of his horse the ball entered a little above the ankle, passing downwards and coming out about the centre of the heel. Poor Wryghte of course immediately dropped his gun, and was marched, with the rest of us, about 50 yards to the left of the drays. We then were ordered, with the most horrible oaths and execrations, to lie on our backs. By the orders of the captain one of the party dismounted, as well as himself, while the others held revolvers in their hands directed to the out-stretched party. The captain then inquired of each of us in turn his name, who he was, and whither he was going—at the same time searching and depriving us of all our money and valuables. The captain then proceeded to the drays, accompanied by two of his men, and overhauled everything, emptying packages. The position of the road was well-adapted to their purpose—a wide plain surrounded by bush, commanding a view, up and down, for miles. The bush-rangers, finding a keg of brandy belonging to the carters, stove it in and commenced drinking. All now became one confused scene of drinking, cursing, laughing, joking, and prancing about, the captain the while conversing with us as to how he 'had been brought to such a pitch by the government officials.' After unharnessing the horses, scattering everything about the plain, and threatening to shoot the rams or let them loose—which at our earnest entreaties they desisted from—orders were given to remount, and the ruffians rode off with all the booty they could carry in their saddle bags. During this affair several shots were fired by the same man, who was only restrained from murdering the whole of us by the determined threats of the leader to blow his brains out. The 200 miles of country which I have just travelled from Melbourne nither seem to me the most beautiful that man could

wish to live in, yet in all that distance no sign of protection is given either to the squatter or the traveller."

In many instances £100 was offered by a prisoner to a constable to sanction his escape; in the case of a run-away convict from Van Diemen's Land, £1,000 was offered for his liberty. The quantity of property found on the persons of drunkards and others committed to the custody of the police of Melbourne, was extraordinary. In an account furnished by the police superintendent, it appears that between the 1st of July and the 1st of November, *cash* was taken from the pockets of 175 committals to the amount of upwards of £3,400,* independent of bank cheques, bills of exchange, bags of gold, nuggets, gold receipts, watches, (nineteen in number,) gold chains, rings, jewellery, &c. On one "breach of the peace" £320 was found; on a drunkard, nine pounds three ounces of gold; on a burglar, £170; on a felon, £129; and on another fourteen nuggets; on a horse-stealer, a bag of gold; on a disturber of the peace, £112; on a highway robber, a purse of gold, and £58; on a pick-pocket, a watch, three nuggets, and £4 7s. 6d. The drunkards had generally large sums of money, and gold watches, guard-chains and seals. As an illustration of the state of things, police-superintendent Sturt reported to the governor the following case:—

"William Hatfield, prisoner of the crown, arrived per ship *Manchester*, in 1843. Free on arrival. Convicted of felony at the Circuit Court held at Geelong on the 22nd February, 1851, and sentenced to twelve months' hard labour in the gaol at Melbourne. Convicted at the Supreme Court at Melbourne, 28th May 1852, of 'stealing from a dwelling-house,' and sentenced to ten years' labour on the roads of the colony. The case of Hatfield is only an extraordinary instance of what occurs every day. Scarcely a thief, vagrant, or drunkard that is picked up during the twenty-four hours but what money is found on them, in repeated instances varying from 10*l.* to 100*l.*; with such a state of things it can hardly be deemed surprising that the organization of an effective police should be found a matter of very great difficulty. William Hatfield was, about four months ago, undergoing a sentence in the gaol for a felony; at which time I had cause to punish him for stealing a handkerchief from a fellow-prisoner. He was discharged about three months ago, receiving from the gaoler 50*l.* which he had left in his hands when first imprisoned. It appears that he staid but a short time in Melbourne; and after supplying himself with numbers of rings and other trinkets, he proceeded to the Gold-fields. In selling these rings at night to the gold-diggers, in their tents, he observed where they deposited their money and gold, thereby

knowing in what direction to make his incision into the tent to abstract the same. For an offence of this nature he was apprehended, committed, and now convicted. On his person at Mount Alexander was found about 700*l.* worth of gold, besides notes, altogether, I believe, to the amount of near 900*l.* He effected his escape from Gisborne on the road down to town, by breaking through the watch-house, and made his way into Melbourne. On the second night after, I again effected his apprehension. On his person was a large nugget of gold weighing 1 lb. 3 oz. 12 dwts., and about 175*l.* in cash. He subsequently requested to see me privately, when he informed me that he had a 'plant,' which he would make over to me, as it might be 'sprung' whilst he was in gaol, and he would sooner that I had it than any one else. I subsequently proceeded with him and some police to the heaps of broken stones prepared for the roads lying in front of the government offices, one of which he proceeded to turn over, and abstracted three bags of gold, in weight nineteen pounds. Thus was taken from this man somewhat about 2,000*l.* worth of property, collected in two or three months.

In order to aid the police in preserving order, and securing life and property, the legislative council addressed the lieutenant-governor, praying that an entire regiment of her Majesty's troops might be stationed at Melbourne, to be paid from the colonial revenue; and also that a detachment of the royal engineer corps might be sent from England, to construct, at the cost of the colony, the necessary defences for the protection of the harbour and large towns against an enemy. A similar request for troops was made from New South Wales, and her Majesty's government acting on these urgent representations, ordered a regiment of infantry, 600 rank and file, to proceed to Australia, four companies (400 men) to be stationed at Victoria, and two at New South Wales, the whole cost of pay, subsistence, and barrack accommodation, to be provided from the colonial revenues. The cost of six companies (comprising 600 men and officers) of the 40th infantry, to be defrayed in England and in Australia from the colonial revenues, is estimated at £19,250; exclusive of the extra pay granted by the local legislature: in consequence of the high cost of living, resulting from the gold discoveries, an allowance was made of 5*s.* a-day to thirty-seven officers, and 3½*d.* a-day to 630 non-commissioned officers and privates, serving in New South Wales, and in Victoria in 1852. It was estimated that the cost of two companies of infantry, comprising 200 men and officers,

† On this estimate the annual cost of a regiment of 10 companies is about 34,000*l.*, or 34*l.* yearly per man all round, not including barracks, clothing, arms, ammunition, &c.

* Parl. Papers, 28th February, 1853, pp. 288—291.

including one field-officer and one assistant-surgeon=£5,281: 5s. a-day to thirty-seven officers=£3,376; 3½*d.* a-day to 630 men, =£3,353. Total, £12,010.

On the cessation of the rains and the re-opening of the roads for easier traffic, the yield of gold was found to have largely increased. The government escort brought from Mount Alexander, between the 8th of September and the 23rd of October, 210,312 oz.; Ballarat sent, in September and October, 68,106 oz. The licenses issued increased at the former, from 28,408 in September to 32,634 in October; Ballarat augmented in the same month, from 2,074 to 4,700. The *private* escort conveyed to Melbourne, between the 23rd of June and the 1st of November, 694,947 oz. The number of persons—men, women, and children—at the gold-fields, was now estimated at between fifty and sixty thousand.

Within the period of a fortnight, 30,000 persons arrived at Forest Creek, chiefly from Bendigo, owing to some very rich diggings having been discovered at *Moonlight Flat*,* about one and three-quarter miles from Forest Creek. At this place, there was procured in nine days, gold to the value of £1,700, from one hole.

At Mount Alexander, on the 17th of September, one man picked out of a creek, a solid piece, containing about nine pounds of pure gold, besides a quantity of smaller nuggets or *pepitas*† around it, in all worth nearly £1,000. A party in the same month, on digging down to the “pipe-clay,” found between nine and ten pounds of gold, lying in a sort of vein on the rock, at an angle of 45°.

At the *Daisy-Hill* diggings,‡ thirty miles from Forest Creek, on the main line of road from Adelaide to Mount Alexander—where, in September, surface-washing was commenced in a blind creek connected with one of the branches of *Deep Creek*—a party, in one afternoon, procured forty-two ounces of gold: the average yield here, was one ounce a man per day. About one hundred miners,

* The diggers gave fanciful names to different localities: such as *Eagle Hawk Gully* (a notable spot); *Beelzebub Flat*—*Peg-leg Gully*, (where a man with a wooden leg was very successful); *New Chum Flat* (savouring, as Mr. Westgarth supposed, of “flat new chums”); *Moonlight Flat*—celebrated at one time for some lawless midnight proceedings.

† The word *Nugget* originated at Ophir, New South Wales, and is probably a corruption of the word *ingot*—in itself a corruption from *lingot*—“a little tongue”—derived from the word used in

chiefly Adelaide men, were successful here; many of them made at the rate of £120 a-week; the nuggets varied in shape and size, from that of a bean to a bent and de-faced shilling.

At Little Bendigo, near Ballarat, a party obtained 208 oz. of gold in one day: the quantity increased as the diggers sunk further into the dip of the rock. Twenty Adelaide miners, in less than a fortnight, acquired £30,000 worth of gold at Bendigo and at Forest and Fryer Creeks; of this, 196 lbs. weight were obtained by a party of three men, at Peg-leg Gully, Bendigo.

One nugget of pure gold found at Bendigo in October, weighed 45 lbs. 9 oz.; § three previous discoveries in the same neighbourhood, weighed respectively, (1) 27 lbs. 8 oz. (exceedingly bright and pure); (2) 28 lbs. 4 oz. (with some iron incrustations and small fragments of quartz); and (3) 24 lbs. These were all extracted from the superficial gravel; and three (the 45 lbs. and Nos. 1 and 2) were taken from the same hollow—two being found close to each other. The 28 lbs. 4 oz. nugget, which was obtained from a superficial bed of clay, iron-stone, and quartz gravel, at a depth of three feet below the surface, was purchased from the finder by the lieutenant-governor and local authorities, at the price of 86s. per ounce, and transmitted, on the 24th of September, to the Queen, as a specimen of the precious treasures of the colony named after her Majesty. Large masses were obtained at Canadian Gully, Ballarat, at a depth of fifty to sixty feet, in a bed of compact broken quartz; the largest, procured by four men, about two miles from Ballarat, weighed in gross 134 lbs., of which about 126 lbs. consisted of solid gold.

The uncertainty of gold-digging was observable in every locality, but especially at Ballarat; holes which proved singularly productive, were flanked for yards by others which yielded nothing; even experience was at this period at fault, for the miners were engaged in washing a dozen sorts of

Hebrew to designate the wedge of gold which Achan purloined [see Joshua, ch. vii., v. 21]. In California a mass of gold is called a “lump”—the Spanish term *pepita*, is applied to those of small size.

‡ At this place, in the direction of the Pyrenees, forty to forty-five miles from Castlemaine, about four years previous a heavy lump of gold was picked up (see p. 264.)—but its discovery then excited no more than a transient curiosity.

§ The largest mass found in the Ural mines was 70 lbs. weight.

clay, of which one only might prove auriferous; a yellowish gravel, a rich reddish-brown and green earth intermixed and lying on a deep yellow clay, seemed to yield the best in some holes; while, in others, a firm compact white sand super-imposed on "pipe-clay" (schist), of the same colour, and immediately under and intermixed with opaque white quartz, proved the ground worth working, and yet materials so distinct might be found in holes contiguous to each other. A beautiful parti-coloured clay, intersected with a fine pink colour, occasionally with a bright red or Spanish-brown, was thought a favourable indication, but, as regards gold, it proved valueless.

The precious metal hitherto seemed to be more unequally distributed at Ballarat than at Mount Alexander, where it was more on the surface, but the prizes were, in some instances, larger to a few individuals at the former place. The comparative easy work at Mount Alexander, and the extent of the auriferous field (supposed to be 200 miles around the mount—the circumference of whose base is forty miles), naturally drew the largest population thither, so that the neighbourhood looked like the encampment of an immense army, in tents of all sizes, shapes and colours, extending over ten or twelve miles. The want of water was, however, a great drawback. In the deep diggings, or rather mining, at Ballarat, the gold was in fine dust, but in large quantities, embedded in *laminae*, or flakes of earth. From three to four pounds weight have been collected in such situations in a week. Sometimes a shaft of thirty or forty feet would be sunk without a speck of gold being seen, and then twenty or thirty ounces might be obtained daily for some time.

Elated with the prosperity of the province, the Legislative Council* addressed the Queen, setting forth the "salubrity of the climate, as evinced by an almost total exemption from endemic disease; the fertility of the soil, as shown by an exuberance and fecundity of both vegetable and animal life, almost unexampled,"—a sale of Crown lands since the foundation of the colony, to the amount of £1,372,055—the geographical position in reference to the other Australian

colonies—the safe and capacious harbour, and other circumstances as affording pretensions for Victoria being made the seat of supreme government of all the Australasian settlements, the legitimate seat of an ulterior appellate jurisdiction, the chief pivot of postal and steam communication, and the headquarters of naval and military forces. In reply to this address, the Queen expressed the interest with which her Majesty had followed "the marvellous discoveries of mineral wealth," and satisfaction at being informed of the extensive and general participation of the Australian colonies in the benefits which had accrued from those discoveries; it was added that the cumulative proofs which the address afforded of the development in so many directions of the natural advantages of Victoria, and the industry of its inhabitants, had led the Queen to form very hopeful anticipations of its future destiny, but that it was "not deemed advisable to constitute any seat of supreme government in the Australian colonies."

In proportion as Victoria and New South Wales prospered by the production of gold, and increase of inhabitants, South Australia (where gold was only found in very small quantities, and not worth the labour of extracting) suffered by the abstraction of its population, who rushed to the neighbouring colonies; as many as twenty vessels at a time were lading with emigrants at Adelaide; in some districts the men left *en masse*—the value of property rapidly diminished—for instance, Burra Burra mining shares fell in a few months from £170 to £70—there was a general stagnation of business—commercial affairs were paralysed—coin was exported to Victoria, and the bank-note issues based on the quantity of metal in the coffers of the joint stock companies necessarily diminished, causing a corresponding contraction of discounts—and the revenue of government became seriously endangered. Under these embarrassing circumstances of loss of population and capital, the lieutenant-governor (sir H. E. F. Young) was urged by the leaders of public opinion to place a fixed price on gold imported into the province under his administration, and to establish an assay-office at Adelaide, whence ingots of a known fineness and weight could be issued, which would supply to some extent the void created by the diminution of the metallic currency.† The necessity of upholding the solvency of the trading and other monetary interests of the colony, and an urgent appeal

* In September, 1852—See Parl. Papers, 28th February, 1853, pp. 254 and 331.

† See *Despatch* from Lieutenant-governor Young to Earl Grey, of 6th January, 1852. Parl. Papers, 14th June, 1852, p. 112.

from 130 merchants and other principal inhabitants, imploring the lieutenant-governor, in the extreme emergency of the times, to save the colony, induced his excellency to summon an extraordinary meeting of the local legislature, by whom, after full discussion and mature deliberation, an act was passed (28th January, 1852) to appoint a government-assayer, who was authorised to receive all uncoined gold, not less in quantity than twenty ounces, to be melted into ingots of convenient size, stamped with their weight and fineness, and delivered in that state to its owner at any one of the local banks he might select. The charge to the owners for this assay and stamping was one per cent. Furthermore by this legislative act all persons were entitled to demand from any bank in the colony, in exchange for gold bullion thus assayed and stamped, bank notes at the rate of 71s. per oz. of the standard of coined gold, according to the law of England (the price of which is 77s. 10d.;—and the banks were authorized to issue (in addition to their paper then in circulation in the province) notes in exchange for any bullion purchased or acquired, at the aforesaid rate of 71s. per oz., provided they kept gold or silver coin in their coffers equal in amount to one-third of the notes so issued, under a penalty of £100 a-week for so long as there might be any deficiency of such securities. The bullion so acquired by the banks was not to be sold, exported, or otherwise disposed of until the notes issued thereon were withdrawn from circulation, or unless the banks possessed coin of the realm equal in standard value to the bullion exported or sold. Notes thus issued were made a legal tender in the colony, and accounts were furnished weekly to the governor, who was empowered to inspect at all times the actual state of the banks. The act was to cease and determine at the expiration of twelve calendar months. It received the qualified approval of her majesty's secretary of state, Sir J. S. Pakington, on the 10th of October, 1852; but, as may be supposed, was censured by the gold purchasers in Victoria and New South Wales, who wished to keep down the price.*

* The various correspondence and opinions legal, financial, and commercial, on this interesting subject are well worth perusal, and evince considerable ability in the advocates and objectors to the measure—among the latter was the lieutenant-governor: the documents connected with the measure will be found in the Papers on *Gold in Australia*,

At the period when this measure was adopted in Adelaide, fixing the price of gold at 71s. per oz. there, the metal was selling at Melbourne for 60s., and at Sydney for 63s., the flow was consequently directed to South Australia, not only for the use of the colony, but for export to England, as after paying freight (one-half per cent.) and insurance (say two per cent.), the "dust" or "nuggets," owing to their purity, were really worth nearly 80s. an oz., consequently a considerable profit would be realizable by the shipment. Any person taking this Australian gold to the royal mint, in London, would be entitled to have it coined into sovereigns at the rate of 77s. 10d. per oz. standard, which might be shipped to Australia, or he might receive from the Bank of England an equivalent in notes, for the purchase of consols or of merchandize, or any other commodity.

In order to facilitate the transmission of gold to Adelaide, Mr. M'Laren, the surveyor-general, with a party of sappers, was sent in January and February to explore a new line of route from the ferry at Wellington on the river Murray, to Mount Alexander, a distance of nearly 400 miles. Between Wellington and the boundary line of Victoria, a distance of 127 miles, nine wells were sunk at various intervals—in seven of these good fresh water was obtained; the country within the Victoria boundary, which was crossed at 33° 21' 50" S. lat., was found to be well watered and presenting abundant pasturage.

The next step of the South Australian government, was the establishment of a gold escort, which consisted of three light spring-carts, with three horses each, for which there were relays at short stages. The journey over a rough country, with several rivers, was accomplished at first in twelve, then in ten, and ultimately in eight days. Gold was bought by the South Australian government at the Victoria diggings, for 71s. per ounce, or paid for in Adelaide at that rate, and the escort received any amount of gold in charge; numerous small parcels† were thus remitted by the fifteen or sixteen thousand of miners from Adelaide, to

laid before Parliament, 28th February, 1853, pp. 336 to 411.

† The government escort in Victoria refused any parcels under one pound weight; the miners were therefore obliged to hoard up their ounces of dust, until they reached the prescribed quantity; but in the meantime, they might be robbed of their savings.

their wives and families in South Australia. The good effect of these measures was soon felt at Adelaide, in the restoration of public confidence, and the receipt of large quantities of gold from Victoria. The escort, on its two first journies, conveyed 25,235 oz. from Mount Alexander, and between the 10th of February and the 1st of May, 87,740 oz.—the charge of two per cent. defraying all the police and escort expenses. Nearly the whole of the gold thus attracted to the colony, was the property of its merchants and the absent diggers, who had thus a strong inducement to return with their gains to their originally adopted country. The cessation of the commercial panic at Adelaide, is shown by the amount of paper under discount, before and after the passing of the Legislative Bullion Act: in about three months, the current paper in the three banks stood thus:—

Banks.	Before the act passed.	After the act passed.	Reduction.
	£	£	£
South Australian bank	280,000	180,000	100,000
Bank of Australasia	160,000	60,000	100,000
Union bank of Australia	120,000	70,000	50,000
Totals & Difference in three Months }	560,000	210,000	250,000

The falling rates of exchange, which had been much against the merchants, was stopped; time was given to debtors to ship their overstocks of merchandize to Melbourne; an ingot of pure gold, assayed and stamped at 71s. per ounce, was found to possess an intrinsic value, free from the evils and dangers of a depreciated or merely nominal value paper currency, and an improvement quite unprecedented took place, which, before its occurrence, would have been deemed almost impossible.* At the end of the year for which the law was made (viz., 1852), the price of gold in Victoria and New South Wales, had advanced up to and beyond the limit of 71s. per ounce, fixed by the South Australian legislature, the measure therefore terminated naturally without any of the injurious consequences predicted by its opponents, and it drew to Adelaide from Victoria, during the year, 347,913 oz. of gold, at 71s. per oz. = £1,235,091. Having

* As an illustration of the improved value of property, it is noted that a tenth of a choice acre allotment in Victoria-square, Adelaide, sold in March, 1852, for £530; being at the rate of £3,300 per acre.

given the foregoing exposition of the state of affairs in South Australia, we may now resume the narrative of the gold discoveries in Victoria province in 1852.

We have first to notice a new field of operation, termed the *Ovens* diggings, situated in Spring Creek, which flows into the river of the above name: distance from Melbourne about 200, or, some say, 250 miles. Chains of mountains stretch around in various directions; broad spaces of bare granite glow in the sun, and on these ridges and in the crannies, where there is not apparently a particle of earth, a species of pine, with foliage like a Scotch fir, but tapering like a larch, luxuriates; shrubs and flowers occasionally relieve the monotonous aspect of a road, with hills after hills scantily dotted with eucalypti and acacia of different sorts, many looking shattered and weather-beaten. In November, 1852, there were hundreds of cradles at work on the water's edge, amid a succession of gravel pits, for more than a mile on each side of the creek. Some were successful, securing eight to ten ounces a day for a week; a few procured two pounds a day for a party, but many did not obtain sufficient to pay their expenses. The richest spot was, as usual, the *bed* of the stream, but the work required strong hands; the dust was deposited in a drift of rounded or decomposed quartz, lying upon granite in intersections of the *May-day* hills. Eight men of the "*navvie*" breed, not unfrequently failed in keeping up the shored walls and bailing out the water; but when this was done, large prizes rewarded the toilers—for instance, one hole yielded sixteen pounds of gold in a single day; another, seventeen pounds in a week; the great majority were content to make one ounce of gold a man every day.

A scene on the way to the Ovens is thus graphically described by that pleasing writer, William Howitt, himself a traveller thither in December, 1852:—

"Singular groups pass us continually on the road. Here are five or six diggers on splendid horses, with their 'swag' before them, consisting of a rug rolled round their damper, &c. Here again career along diggers of a more work-a-day description, on lanky horses with switch tails and a more weather-beaten swag; the men themselves in nothing but dirty cabbage-leaf hats, shirt and trousers, and belt round the waist, with a tin pannikin hanging behind. There, again, goes a train of bullock teams. They are all the property of one man who travels from one digging to another with stores—sugar, flour, cheese, &c. See, they come to a creek. All halt, take out their bullocks, and let them graze.

Out of one covered waggon comes a flock of children, from two to seven or eight years old, followed by their mother with her sun bonnet shading her neck with a broad flap. A fire is made and the kettle set on, and the frying-pan brought out. But there again. See what a train. It is like the retainers of some feudal baron. First rides a man in a cloth cap with a gold band and scarlet mantle that floats behind him. He has a led horse carrying swag in a leathern wrapper. Next comes another man in ordinary dress leading two horses; and finally, one with the cabbage-tree bee-hive helmet of the mounted police leading another horse. They belong to the officers of the mounted police."

A picture of the actual proceedings at the Ovens River diggings, is given by the above-named interesting writer:—

"Reaching the brow of a hill we see a broad valley lying below, and white tents scattered along it for a mile or more. The tents right and left glance out of the woods on all sides. In the open valley they stand thick, and there is a long stretch up the centre of the valley, where all the ground has been turned up, and looks like a desert of pale clay. After our long pilgrimage it seems as if we ought never to arrive at our journey's end, but to go on and on . . . We descend the hill. There stands a large, wide, open tent, with a pole and a handkerchief twisted round it. This is a store or shop. We go on. Huts, dusty ground all trodden, trees felled and withering in the sun; here and there a round hole like a well, a few feet deep, where they have been trying for gold. Down we go. More tents, more dust, more stores, heaps of trees felled and lying about, lean horses grazing on a sward that a goose could not lay hold of, hole after hole, where gold has been dug for, and now abandoned, linen hanging out to dry, horrid stench from butchers' shops and holes into which they have flung their garbage. Along the valley to the left grows a smooth sward. What there is, however, to indicate gold here more than in a thousand other places that we have walked over with unconscious feet, we cannot see. Up the valley hundreds of tents are clapped down in the most dirty and miserable places, and all the ground is perforated with holes, round or square—some deeper, some shallower, some dry, some full of water; but in very few of them does work seem to be going on. They have flitted to other holes. All between the holes the hard, clay-coloured sand lies in ridges, and you must thread your way carefully among them if you don't mean to fall in. Still horrid stench of butchers' shops and garbage pits; stores after stores; tents, and booths, and bark huts, like a fair. There is the creek, or little stream, no longer translucent, as it came from the mountains, but thick as a clay puddle, and rows of puddling tubs standing by it, and men busy washing their earth in tins and cradles.

"Such is the first view of the diggings. But we turn up to the left into a green quiet glade of the forest, and there pitch our tent at a distance from the throng, and where there is feed for the horses. A hasty tea, and away we go to the commissioners' tent for our letters. It is on the other side of the creek; two of these stately tents, in fact, lined with blue cloth, and with other tents in the rear, the whole enclosed with palings. . . . If you could see our pots, pans, pannikins, our tin dishes, some for

making loaves and puddings in, others for washing in—our knives, forks, spoons, lying on our bags of sugar, rice, flour, &c., standing about, our tea-chest, our lantern, our tin tea-pot of capacious size, our teakettle in constant requisition, our American axes for chopping firewood, our lantern at night suspended from a string in the tent—the interior of our tent, with the beds spread out broad over part of the floor, and covered with grey rugs; the tent hung round with pieces of dried salt beef, straw hats with veils round them, caps, and so on; our guns standing in a corner, with books and writing-cases and portfolios—you would say it was a scene at once curious and comfortable-looking.

"I have taken a round among the diggings, and seen the people washing their gold. They seem to have a good deal. One man had, after pouring off the sand and water from his tin dish, a pound weight; another had five or six ounces, and so on. Numbers are out exploring all round, and it is expected that great discoveries will be made. No language, however, can describe the scene of chaos where they principally are at work. The creek, a considerable brook, is diverted out of its course, and the whole of the old bed dug up; each side of the creek is dug up, and holes sunk as thick as they possibly can be to leave room for the earth that comes out. They are, in fact, pits and wells. Out of these, of course, the earth has to be drawn up in buckets, and some have rudely-constructed windlasses, others blocks and pulleys. They ascend and descend, the diggers themselves, by holes cut in the side, holding by a strong rope or strip of bullock's hide. To-day many of these holes are nearly filled with water from a deluging thunder-storm of last night; for we find, so far, that about three days of broiling heat runs into thunder-storm, and then there is often cool weather for awhile, with nights as cold as winter. So it was last night. As we were watching the people washing their gold at the creek, we noticed that a great crowd gathered round a little green rocker, as they called it—a little green painted cradle. They said that the party belonging to that rocker had washed out 7 lb. of gold from nine tin dishes of stuff. All eyes, therefore, were on the watch to trace the party to the hole they came from, and then a desperate rush was made to that spot. In a few hours hundreds of claims had been marked out as near as possible to the golden hole. It was curious to see what swarms were at once on the place, engaged with their picks and spades. In a few hours a great space of many acres was marked out, and more people were flocking in, so that they bade fair speedily to come up our quiet glade to our very tent."

Another and very remunerative field of operation—the *White Hills*—deserves notice. These are situated on the south side of Bendigo creek, are of some height, and have the appearance of being covered with snow, from the quantity of the so-called *pipe-clay* brought from beneath, and cast over the surface, during the search for gold by the miners, who here look like millers or lime-burners during their operations. This singular substance, which, like the chalk and older limestones in the northern hemisphere, appears extensively to pervade the

country,* is, according to Mr. Westgarth, "in structure of a soft shaly character, and usually of a white or satin hue, but occasionally also lightly tinged with a blue, yellow, or other colour: it prevailed at Ballarat of a bluish-grey hue—hence the denomination of the celebrated *blue clay*"—where gold was found so abundantly. This author adds—"the bed of this substance is much thrown out of its original horizontal stratification, and in the many interlaminar furrow and crevices on the upper surface, where it joins the superincumbent gravel, deposits or *pockets* of gold were frequently met with."† According to another authority, the pipe-clay is silicate of alumina, decomposed from silicious slates and granite. But whatever be its origin or component parts, gold is now found *in, on, and beneath* it, according to the period when the metal was separated from the parent source, "whether before, after, or during the development of the decomposed felspar."‡ Some diggers, on coming down to pipe-clay, would retire on finding no gold; another party pierced the white floor, and obtained wealth. In *Californian gully*, more than six feet of the pipe-clay contained gold. The depth of this shale, schist, or silicate of alumina varies from one inch to forty feet; occasionally—as in the shallow, lucky holes of *Peg-leg gully*—there is none.

At the *White Hills*, the strata are—(1) surface gravel for several feet; (2) clay mixed with gravel; (3) white quartz boulders imbedded in their own debris; (4) a stratum not exceeding two inches in thickness, consisting of quartz grit, distinctly defined from superincumbent quartz, in a different form; (5) *pipe-clay*, commencing at depths varying between twenty-five and sixty feet. This quartz grit appeared to be saturated with gold, especially the lower part of the stratum, which, for about two-thirds of an inch, was a reddish-brown tinge, deepening in hue to the base of the bed, and apparently caused by oxide of iron. A bucket-full of this quartz grit yielded generally, on washing, two to three ounces of gold, *i. e.* from £6 to £9. In consequence of this high remuneration, shafts were sunk at considerable depths, upwards of 100 feet being pierced, and tunnels driven in diverse directions, in search of

so rich a harvest. Here and at other sinkings a rude but effective Yankee windlass was used: it resembled a gigantic cart-whip, the butt end loaded with a piece of heavy timber, and the thong end of the lash having a bucket attached; when this was filled with the auriferous grit, and a slight upward impulse communicated, the heavy end of the butt descended, and the bucket was instantly lifted to the surface. How far this rich stratum may extend is unknown, as is also the amount of wealth still to be worked beneath the *White Hills*.

Before closing the chronological narrative of proceedings in Victoria for 1852, it is advisable to give some general review of the state of affairs at the termination of the year; and first with regard to the immigration and emigration which took place by sea during this period:—

Months.	Immigrants.	Emigrants.
January	7,494	550
February	7,460	847
March	5,073	1,239
April	4,111	1,511
May	5,631	1,629
June	3,872	1,614
July	4,271	2,383
August	6,552	1,618
September	15,855	1,841
October	19,162	3,637
November	10,947	4,287
December	14,255	5,866
Total	104,683	27,022

This only shows the *recorded* arrivals; there were many unrecorded, not only by ship, but from the adjacent colonies of New South Wales and South Australia, who travelled by land. In March, 1851, the census of Victoria showed a population of 77,000, which, in one year, without reference to the natural increase by births, received an augmentation of at least 80,000 persons.

The large addition of working hands helped materially to develop the metallic treasures, but there are only approximative data to show the progressively increasing production of the gold fields.

Mr. Westgarth has prepared a table, from detailed returns obtained from the colonial treasury at Melbourne, and from the *Victoria Escort Company*, showing the quantities of gold brought from the different mining fields into Melbourne and Geelong, to which he has added a table of the quantity exported for each month to the close of 1852: but it should be remarked that many miners con-

* A somewhat similar strata occurs at Echunga, South Australia, but it is devoid of gold.

† Victoria in 1853; pp. 139, 140.

‡ Article on the *Geology of the Gold Fields*, in the *Melbourne Gold Digger's Manual*.

veyed their own treasure to Melbourne; and a large quantity passed into South Australia and to New South Wales; and, as regards the exports, shippers, after the plunder of the *Nelson*,† were rather afraid to state the quantities on board vessels, lest they should be holding out an inducement to pirates.

Gold Received by Escort at Melbourne and Geelong, and exported from the different parts of the Colony.

Months.	Received by Escort from—			Total oz. by Escort.	Exported by Sea.
	Ballarat.	Mt. Alexander and Bendigo.	Ovens River.		
1851 August	—	—	—	—	18
September	121	—	—	121	—
October	4,390	228	—	4,618	1,560
November	9,448	17,816	—	27,264	3,441
December	6,391	65,759	—	72,150	140,128
1852 January	246	53,348	—	53,594	160,477
February	118	56,024	—	56,142	152,560
March	644	61,382	—	62,026	107,406
April	484	67,557	—	68,041	92,512
May	814	76,433	—	77,247	94,975
June	1,446	114,563	—	116,009	152,242
July	581	319,637	—	320,218	179,412
August	2,230	311,965	—	314,195	172,091
September	2,165	305,117	—	307,282	161,189
October	6,314	271,260	—	277,574	248,397
November	14,694	260,641	5,783	281,118	322,550
December	13,926	126,635	9,020	149,581	131,163
Total ounces	64,012	2,108,365	14,803	2,187,180	2,120,121
Per Victoria Escort from Kye- ton, &c.	—	—	—	3,692	—
Grand Total oz.	64,012	2,108,365	14,803	2,190,872	2,120,121

There being but one escort establishment for Mount Alexander and Bendigo, their product is classed together. The table shows the fluctuation in the monthly yield; and that Ballarat, which in February was nearly deserted, in November and December made large returns, and indeed in the subsequent months became one of the richest fields.*

The intelligent authority to whom I am indebted for the foregoing table states the total yield for the entire of the above-men-

* The export by sea to different countries during 1851—2, so far as known was—to London, 1,739,504; Liverpool, 20,120; Calcutta, 22,000; Singapore, 5,396; Sydney, 313,912; Hobart Town (Van Diemen's Island), 1,965; Adelaide (South Australia), 13,813; Hamburgh, 3,411: Total, 2,120,121 oz.—The amount of specie (coin) imported into Melbourne and Geelong in the year 1852, is stated by Mr. Khull to have been—January, £20,000; April, £40,000; July, £200,000; August, £90,000; September, £538,000; October, £432,000; November, £397,800; December, £150,000; estimated amount by private hand, £632,200: Total, £2,500,000.

† The barque *Nelson*, while lying in Hobson's Bay in April, 1852, awaiting a full complement of crew, was boarded by twenty-two armed men in two boats, who wounded the mate, tied up the crew, and

tioned period, ascertained and estimated in oz. troy, as follows:—

—	Ascer- tained.	Estimated.	Total.
	Oz.	Oz.	Oz.
Exported per Official Returns	2,092,385	—	—
Ditto do. Overland to Adelaide	228,533	—	2,320,916
Unrecorded Export:—			
N. South Wales	344,913	230,000	574,913
Van Dieman's Land	177,680	67,000	244,680
South Australia	327,913	20,000	347,913
England, India, &c.. . . .	—	50,000	50,000
Total Exported	3,171,422	367,000	3,538,422
On hand in Colony	709,766	360,000	1,069,766
Total production	3,881,188	727,000	4,608,188
Proportion in 1851	145,146	200,000	345,146
Ditto produced in 1852	3,736,042	527,000	4,263,042

The total quantity of 4,608,188 oz. troy may be considered a near approximation.

plundered the vessel of £30,000 worth of gold which had been embarked as freight by different merchants for England. The pirates got clear off with their unlawful prize.

Much of this gold is nearly pure—that of Ballarat 23½ carat fine; and therefore actually worth about 80s. per oz.; but if the current market price of 70s. per oz. be taken, we have a new product added to the wealth of the colony, in fifteen months, of £16,128,658 sterling; it is not therefore surprising that the value of the imports increased from £744,925 in 1850, to £4,069,742 in 1852.

That this rapid increase of wealth, immense traffic, and great influx of population from every quarter of the globe, and of all classes of society, and shades of vice and crime, must have affected extraordinary changes, is beyond a doubt; but, after examining all available trustworthy evidence, it is due to poor and sinful human nature to show that the people who rushed to the gold-fields were not so bad as they have been represented. I have previously given some of the official reports of the lieutenant-governor to her majesty's secretary of state: in all of them he speaks with admiration of the conduct of the mining population; and I have shown, from the respected testimony of Mr. Westgarth, that sobriety generally characterised the "diggers." Here is the unbiassed evidence of a visitor from New South Wales—a colony in some degree jealous of the wonderful progress of its rival sister:—

"I can, from personal experience and without the least hesitation, affirm, that the tales of robbery and violence are very much distorted and magnified. When it is considered that a mass of some forty thousand souls is here assembled, very many of them coming fresh from an association with professed criminals, amongst whom robbery is a boast, and a deed of violence a recommendation, it is not at all surprising that some unlawful acts should be committed; but in a town population of like amount, guarded by a well-disciplined protective force, and avenged by a cunning detective, similar acts would be committed. At the diggings, moreover, I contend, that taking the amount of population, there is not a fourth part of the crime committed that there is in any town on the Australian continent; and yet there is, in the one case, the almost total absence of police protection and of household security; whilst, on the other, bricks and mortar, and solid doors, interpose between the thief and his plunder, and daily and nightly patrols are on the watch. In fact, I have often been astonished in passing some of the stores that the temptations to robbery which they offer have not more frequently been taken advantage of. I have remarked the sides of some stores composed of nothing more than a few gunny bags sewn so loosely together, that between the interstices might be seen shirts of calico, woollen, and serge; trousers, belts, and all the other paraphernalia so dear to the digger's heart. These would require only one thrust of a knife to change ownership, whilst the thief need be under no dread of detection.

As to the Lynch law, that exists only in name, no one instance having, in fact, occurred. Some few designing men have endeavoured, for their own purposes, to introduce this odious system under the more genial name of self-protection; but, thanks to the good sense, manly feeling, and true British spirit of the diggers, the proposition was scouted with all the contempt and loathing it deserved. Even the publicly-made assertion of one of the self-named leaders of the diggers, that 'the government were prepared to wink at a certain amount of Lynch law,' did not in any way turn them from their honest purpose of appealing only to the law of the land, though the agents of that law were few amongst them, and though its proverbially strong arm was weakened by distance.

"After much consideration and inquiry I have come to the conclusion that nearly the whole of this outcry of the insecurity of life and property at the diggings has originated with a few only—men of low mental calibre, who, in ordinary and peaceable times, struggle in vain against insignificance, to which their want of sterling talent dooms them; and whose only chance of rising into notoriety is, consequently, in the turmoil and disturbance of troublous times. To such as these it thus becomes an object to cause discontent, and to foment anarchy and discord, as, like the bubbles of noxious gas that rise to the surface of some pestilential pool only after strong agitation, these men, by their aptness in stringing together a few clap-trap phrases, manage thus to raise themselves to a position which they dignify by the name of a leader of the people. Some of these are acted on simply by a love of notoriety, but some few have a still deeper object. Penniless in purse, and almost without a standing in society, by thrusting themselves forward as the mouth-piece of the people, in delegations to the government, to the officers of which they are as obsequious in the bureau as they are insolent in the face of a public meeting, a desperate game for place is played, in the hope their influence may be deemed valuable to meet the storm which they themselves have raised.

"So far as I have seen of the diggings, the days are spent in toil and the night in rest, except only in the neighbourhood of some of the sly grog-shops, in which scenes of drunkenness and debauchery may be sometimes witnessed. As the sun sets, the diggers retire from work, and the savoury smell from a thousand frying-pans indicate the kind of employment to which they next devote themselves. No sooner is the evening meal finished than some bugler strikes up some lively or well-known air, at the conclusion of which some rival performer advances his claims to superiority. At the conclusion of his essay, during which there has been the most profound silence, loud shouts of applause greet him from the tents around him, whilst those in the neighbourhood of his antagonist answer by mocking, by good-humoured cheers, joined with recommendations to 'lie down,' and 'shut up.' Anon the first bugler again commences, and instantly there is silence, and when he concludes his friends cheer, whilst the neighbours of his rival pass some playful commentary on his performance. In this way the rivalry is kept up for some time, till the buglers get tired and bid each other good night, leaving the silence to be disturbed only by the barking of dogs, the neighing of horses, and the firing of guns. One night we were amused by three players on the cornopean at different parts of the creek, who replied to each

other, one selecting English, another Irish, and the third Scotch airs; I need not tell you what a beautiful effect this had, especially as after each air a volley was fired, almost with military precision, in the quarter whence the musician gave forth his sweet notes. Hore's brass band has lately been playing for an hour or so every evening, and the shout that greeted, each time as it was concluded, must have rather astonished the knowing-looking old opossums in the gum trees on the ranges overhead.

"Picture to yourself some forty thousand souls, for so many there must be, all resting under tents, the ends of which are triced up in hot weather to catch any passing breeze, many of them unguarded by a dog, and sleeping as sound as men who labour hard through the day always sleep, and then wonder, not that there are the few trifling depredations that we hear of, but that there are not far, very far, more. But, in truth, any person who keeps himself quiet and orderly, has little fear of being molested or disturbed; it is only those who, hankering after drink, resort to the sly grog-shops, that are in danger of being robbed, and these, thrusting themselves into bad company, cannot expect aught else than to pay the penalty of it. To such as these, but small compassion can be extended; they know the danger they brave, as all are well acquainted with the fact that the lazy, the criminal, and the scheming make these tents their resort. This fact is well known to the authorities on the diggings, and too much credit cannot be given to the commissioners for the exertions they make to put down these sinks of iniquity. Hardly a day passes without at least one of these tents being burnt by the police, whilst some days witness two or three conflagrations.*"

As regards Melbourne, unfair and exaggerated statements have been purposely put forth as to the state of society in that city; the following letter, written by a lady who had then resided there several years, and who, from her position in society, had ample opportunities for observing what she writes of, will show the actual condition of the place: it is an act of common justice to the citizens, that the letter (which was published in the *London Times*, and vouched for) should be placed on permanent record:—

"Melbourne, Nov. 24, 1852.

"As to the state of society, it has never in the least degree interfered with our comfort, further than the hearing of it. We enjoy the ministrations of a godly man, we have our Bible and Auxiliary Missionary Societies, our Sabbath-school and benevolent societies; we have never, on any occasion, been kept from our Sunday and week-evening meetings, nor suffered the least annoyance; and even at the diggings people may, and do, live as retired as in town. That there are large numbers who belong to the worst class of society is undoubtedly true; that the plentifulness of money has led to a great increase in intemperance, is also painfully visible in our streets; but the large number of our respectable working population now in comfortable cottages of their own, and the large amount of land and house property sold at high prices, show it does not all go into the tavern. Even yet, our numerous strangers express themselves surprised at the decency and de-

* *Australian and New Zeal. Gaz.* 4th Sept., 1852.

corum with which the Sabbath is kept; I say it not without consideration—equal to any town in Scotland."

That there was much sin, suffering, and sorrow, cannot be doubted; but let all the circumstances of the case be impartially considered before a judgment be formed. The London journals have been filled with dolorous statements. Let us hear what the lieutenant-governor says in a despatch to the secretary of state, when referring to the influx of population, calculated at thousands weekly. Adverting to the character and prospects of the immigrants, he stated—that, amongst the new comers, it was evident not one in ten were prepared to encounter the crush and labour of the gold-fields; the great majority were unfitted and unsuited by previous habits, occupation, or temperament, to surmount the difficulties which beset them in becoming colonists at the present time. The strong and active labourer, the clever mechanic, the thoroughly competent clerk, and the energetic of all classes, gradually worked their way at the gold-fields, or elsewhere; but the multitude of decent men of small means and large families, decayed or unfortunate tradesmen, half-educated clerks, young men of no decided calling or character, professing their willingness to do anything, with the power of doing nothing well, the horde of weak or irregular characters whose expatriation has been advocated or assisted by relatives, for the purpose of getting rid of them at home; and the undisguised worthless or dissolute, undoubtedly suffered great privations and positive hardships. The father of a large family soon saw his little all swallowed up in the purchase of the bare necessities of life—a sovereign going no farther in Australia than half-a-crown in England—and the man with a slender purse, after paying enormously for the landing of his baggage and himself, found himself on the beach at Melbourne nearly penniless. On these grounds Mr. Latrobe thinks the sufferings endured were almost unavoidable.

But, as regards my own impressions—based on the facts communicated to me from Melbourne—while admitting the correctness of the preceding statement of the lieutenant-governor, I cannot help thinking that, amidst so much providence and miscalculation, there was still a lamentable neglect of the unfortunate immigrants: the colony wanted heads as well as hands; and the authorities might have turned both to

good account, instead of leaving, as the lieutenant-governor admits, "large numbers of the new comers to pass both day and night without shelter at all." The Wesleyan body had the credit of taking the lead in procuring temporary shelter and relief for these unfortunate people. A sum of £2,000 was collected by subscription among their members, to provide a "refuge for the houseless"—primarily to those in connexion with their community, but in effect, so far as their means would admit, for all who needed this aid.

The evil became at last so flagrant, that on the 5th of October, 1852, a large public meeting was held at Melbourne, headed by the bishop, Mr. Westgarth, and other benevolent persons, with a view of raising £4,000 by subscription, to provide a refuge for the "houseless," which was done: government then lent its aid, and a considerable amount of suffering was relieved. Let us now briefly examine the proceedings in New South Wales in 1852.

Although the elder colony took the lead in the discovery of gold, either from want of sufficient population, or owing to the less concentrated deposit of the precious metal, its production during 1852 was small compared with that of Victoria; but the Rev. W. B. Clarke asserted, after extensive geological investigations, that gold in variable quantities is distributed over an area in the colony of 16,000 square miles, not including any portion of the country to the northward of the parallel of *Marulan*—a township in Argyle, 109 miles south of Sydney; and at the close of an exploration tour extending from September, 1851, to June, 1852, he observed—"for nearly nine months, I have been travelling, from day to day, over fresh evidences of the distribution of gold."

The matrix whence the golden nuggets, grains, scales, and dust, are derived, has yet to be discovered. It may, as regards New South Wales, be found in the *Canabolas* mountain range, which consists of a mass of trap rock, forming some of the highest elevations in the country (the greatest altitude, 4,461 feet above the sea). From this lofty ridge the general direction of the waters is northward towards the river *Macquarie*; the lowest point of the same terri-

tory being where the *Macquarie* is joined by the *Bell River*, at a height of 878 feet above the sea. Between these two extremes there are remarkable evidences of igneous and aquatic action, and in their localities gold, in its matrix or original bed, as well as in a fluviatile state, may be expected. On the margin of the trap rock of the *Canabolas* pure gold has been found amongst un-abraded fragments of quartz, and combined with iron-stone.*

The precious metal has been obtained, though sparingly, in the *Macquarie*, from Wellington to Dubbo, small in grain, and apparently drifted from the numerous creeks above Wellington, as well as from the highlands of the upper part of the river itself. Beyond Wellington Valley, near Mitchell's Creek, adjacent to a low dyke of trap rock, there are hills of quartz, from which, for some years, the shepherd, Macgregor (previously referred to, p. 402), procured gold. There appears to be a more capricious deposit of the metal in New South Wales than in Victoria; at one place (*Poor Man's Point*, *Patterson's Point*), one party obtained thirty, forty, and even fifty ounces a-day from a single claim, while no other opened in the vicinity repaid the labour expended thereon. This circumstance, and the fact of profitable employment being open to all branches of labour, caused a considerable diminution of the gold-fever in New South Wales in 1852.

During February there were not more than 200 diggers at *Ophir*, who were earning about half-an ounce a-day each. At the *Hanging Rock* there were about 50; at *Braidwood*, 800—of whom 500 were at *Beil's Paddock* and *Moreing's Flat*. The small yield of New South Wales mines compared with those of Victoria, is shown in the quantity sent to Sydney, by escort, in one week in this month. From *Braidwood*, 663; *Araluen*, 324; *Bell's Creek*, 33; *Mudgee*, 200; *Avisford*, 381; *Sofala*, 1,796; *Albury*, 48; *Gundagay*, 26 oz.; smaller amounts from other places.

Governor Fitzroy at this period (February 21) reported to her majesty's secretary of state the beneficial results attendant on the appointment of clergymen, of different denominations, to minister to the spiritual wants of the diggers at the several gold-fields; and he added—"there is no more satis-

* See valuable *Scientific Report* of the Surveyor-general, Sir T. L. Mitchell, 16th October, 1851. Sir Thomas, in a letter with which he has favoured me, dated 4th January, 1854, says—"down the river

Lachlan, for 170 miles beyond the diggings, and even between the *Bogan* and *Lachlan*, there are auriferous creeks, only accessible at wet seasons.—I, for one, believe the gold-fields inexhaustible."

factory feature in the progress of the gold-discovery in this colony than the order and decorum with which the sabbath has been, from the first, observed by the gold-diggers and others assembled at the several gold-fields: and I am informed that nothing has astonished the numerous parties who have returned to this colony from California more than the general obedience of all classes to the laws, and particularly the regular attendance, on Sundays, of the people at the gold-fields at the places appointed for divine worship according to their several persuasions.*

The attorney-general, during his official visit to the Bathurst district, in February and March, 1852, confirmed this pleasing view of the proceedings of a population who, for some years, have been misrepresented in England. The learned gentleman, in a letter to the colonial secretary, says:—

“SIR,—It is my pleasing duty to report, for the information of his excellency the governor-general, that during the proceedings of the late Bathurst assizes I had ample proof of the wholesome state of public feeling throughout that extensive district, and of the determination of the great body of the people congregated there at the gold diggings to uphold the authority of the law, and to give every assistance to the constituted authorities in preventing and detecting crime; indeed this feeling appeared so general, from several instances which manifested it in the public court, that the presiding judge, Mr. Justice Dickinson, expressed his gratification at it, in some of his charges to the juries, and at the close of the proceedings, again, in reference to it, complimented, not only the juries for their just and proper verdicts, but the whole community of the district. I never received more cordial support in the discharge of my duties; all persons required as witnesses gave their attendance most readily, however inconvenient to themselves (and several instances of great inconvenience I was made aware of).

“In consequence of this state of public feeling there were comparatively but few cases for prosecution growing out of the new state of things connected with the discovery of gold, and the few cases of larceny and horse-stealing that were traceable to it were promptly detected and punished. I never recollect that part of the country in a more orderly state, and I may mention that I myself rode on horseback to and from the assizes *unattended*, and even *unaccompanied* the greater part of the way, and I had no reason to be apprehensive of any danger.

(Signed) “J. H. PLUNKETT.”

In April, the number of gold-digging licenses issued in New South Wales for the quarter ending March, 1852, was 11,835.

Up to May, 1852, the various commissioners of crown lands in the districts of Lachlan, Gwydir, Bligh, Wide Bay, New England, Wellington, Darling Downs, Murrumbidgee, Moreton, Clarence, and Man-

* Parl. Papers, 28th February, 1853, pp. 46, 47.

roo, had successively reported the finding of gold in their respective and wide-spread localities. Some of these ultimately proved not worth (at least surface) working.

The governor-general (Fitzroy) visited the several gold-fields, and received six different addresses, signed by the diggers and residents at *Araluen*, *Bell's Creek*, *Ophir*, *Braidwood*, *the Turon*, and from the inhabitants of Bathurst: the general tone of these addresses may be gathered from that of the *Araluen* miners, who, after alluding to the tranquil and prosperous state of the people, add—“We take this opportunity of expressing, through your excellency, our continued feelings of loyalty and affection to her most gracious majesty, Queen Victoria, and her royal consort, and our confidence in the administration of the government in this portion of her majesty's dominions.”

Up to June, 1852, the placers where gold had been worked in any quantity were in the *western* districts—*Ophir*, the *Turon* River, *Meroo* Creek, *Louisa* Creek, *Abercrombie* River, *Mudgee*, *Burrandong*, *Tambaroura*, and *Muckerwa*: in the *southern* districts, *Major* and *Bell* creeks, *Araluen*, *Mungarlow* River. Gold had been discovered in many other places, but there was not sufficient population to work them. The labourers at the above-mentioned places fluctuated; sometimes one spot was nearly abandoned, then re-occupied, according as caprice or reports of “good luck” prevailed. At *Ophir* (the first place occupied by the diggers), there were from May to August, 1851, six to eight hundred persons at work, whose earnings averaged 20s. a-day; in January, 1852, there were not fifty; but the intelligent gold commissioner, J. R. Hardy, says “the gold at *Ophir* has scarcely been touched, the diggings having been exclusively confined to the banks of the creek; the bed having never been attempted: a very extensive gold-field is untouched at *Ophir*.”

The *Turon* has unfortunately been visited by several overwhelming and tempestuous floods, which have destroyed the works of the miners. In March, the river-bed for some distance was laid out in “claims,” like squares on a chess-board. Many of these claims had been excavated to depths varying from twelve to twenty feet—some more—and were found to be surprisingly rich, yielding as much as 30 oz. a-day. Every claim had its pump, scaffolding, and other mining requisites, and presented from a distance a uniformity not unlike a chain of net-work,

the labour of a busy hive, and affording evidence of the exertions which men will make to obtain gold. But all these indications of skill and toil were swept away in one night, and on the following morning nothing was to be seen but a wide-spread foaming torrent. On such occasions the dry diggings, on the upper banks, or the fresh deposits from the hills, afforded a resource for labour—a party of three or four acquiring generally an ounce of dust per diem. When the waters subside, it is frequently found that they have brought down from the mountains fresh supplies of auriferous materials.

Four thousand diggers in the previous year found profitable employment there: 20s. a-day was the average earnings for some months; but in June, 1852, the population in this locality, including *Sofala*, had dwindled down to 1,500; the majority having gone to Mount Alexander. The river-bed had, however, scarcely been scratched, owing to the long-continued wet season: where, efficiently worked, parties of three or four have been known to obtain twenty ounces of gold in one day. In the adjacent hills rich dry diggings were being constantly found.

The *Meroo* district is very scattered, comprising not only the *Meroo River*, but various tributaries, and the table-land of the high range, at the foot of which the *Meroo* runs,—in its course to the *Cudgegong*, which flows into the *Macquarie*. Within a few miles is the *Muckerwa Creek*, rising from the Wellington side of the *Macquarie*, and disembodying into that river. There were, in 1852, about 800 persons in these localities, but space enough for as many thousands. On the *Louisa Creek*, one of the tributaries of the *Meroo*, where Dr. Kerr obtained the hundred-weight of gold (see p. 410), a quartz-crushing company was then commencing operations with machinery.

Tambaroura Creek runs parallel to the *Turon River*, midway from the *Meroo*, and empties itself into the *Macquarie River*, about eight miles above their juncture. In geological character and productiveness, this field resembles that of the *Meroo*: about 800 persons were at work in June, 1852. Every small creek or water-course produces gold; and the adjacent table-land, which extends about twenty miles in length by ten miles in breadth, appears to be throughout an auriferous district. The junction of this creek with the *Macquarie* is stated to be a very rich locality.

Abercrombie River, forty miles south of *Bathurst*, forms the upper portion of the *Lachlan river*. Up to the period of this report (20th of June, 1852), it did not justify any high expectations; but *Tuena* and *Mulgunnia* creeks, which flow into it from the higher table-lands, are supposed to be productive: about 100 persons were at work. Here, as in other parts throughout the *western* gold-field, the general features of the country consist of clay-slate, intersected by numerous quartz veins, running generally from north to south, and containing more or less gold: when the veins run east and west, they do not appear to be auriferous, but frequently contain lead or copper.

The *Cudgegong River*, from the source to its confluence with the *Macquarie*, is stated throughout its whole course to be replete with gold; very many of its smaller tributaries, together with the dry diggings of their accompanying flat-lands and swamps, will, in the opinion of the government mineral surveyor, “supply room for thousands of adventurers for many years to come.” The same experienced authority adds, that during the period of cessation which will ensue consequent upon the ill-arranged mode of working in this the infancy of Australian gold-mining, localities that have proved highly productive, but are supposed by the majority to be worked out, will be returned to at a future time, and yield large profits.*

A gold-field was reported by Mr. Commissioner Bligh to exist from the head of *Bingara Creek*, down *Courongoura Creek*, and up the *Guydir River*, a distance altogether of fifty or sixty miles. Forty to fifty diggers were concentrated about the table-land, at the heads of the above-named creeks. Their researches did not extend beyond one or two feet from the surface; the gold found was generally in nuggets and “pepitas,” varying in size from a pin’s head to that of a pistol-bullet; the latter size common, generally not water-worn, but retaining the sharp impression of the substances on which they rested while in a state of fusion. One nugget weighed 14 oz., another 7 oz., and so on. The richest yield was from a short and scarcely perceptible water-course, of about 300 feet in length, and strewn with decayed quartz. The diggers were mostly of a superior class, and manifested a peaceable demeanour. The country at *Bingara* is level, and has the usual characteristics of a gold region—quartz and slate.

* Mr. Stuchbury’s Report of 1st October, 1852.

At *Oakey Creek*, a branch of *Cobidah Creek*, a tributary of the *Horton*, and ultimately of the *Gwydir River*, about seventy-three miles from Tamworth (Liverpool plains), a remunerative gold-field was discovered at the end of 1851. The creek has its source on the western side of an extensive mountain range emanating from the main range of *Bell's Mountain*, and running nearly north, divides the more direct tributaries of the *Gwydir* from those which reach that river by the *Horton*. *Bell's Mountain* range divides the waters of the *Namoi* from those of the *Gwydir*. At the *Hanging Rock Creek* about 200 miners were at work in March.

The mountain ranges whence these waters flow are supposed to consist chiefly of serpentine intersected by quartz dykes of large size. After leaving the serpentine, the *Oakey Creek* flows through beds of clay slate, whose strata are inclined at an angle of about 65° with the horizon, and its channel is filled with fragments of white quartz and of a red quartzose rock, with a sand consisting of the detritus from these and from the serpentine, mingled with particles of clay, and "of a ponderous red mineral."* The surrounding soil is chiefly a yellow clay, with fragments of shale and quartz, and occasionally of a whitish clay, both formed apparently from the decomposition of the clay slate.

The *southern* gold-field, in the neighbourhood of *Braidwood*, 170 miles from Sydney, comprise *Major* and *Bell's* creeks, tributaries of the *Araluen River* and *Mungarlow River* (fifteen miles from the *Araluen*), which flows into the *Shoal-haven River*. Operations were commenced on the above-named creeks in November, 1851, and 1,200 licenses were issued in December; varying numbers have since then found employment in the *Araluen Valley*, which has a width varying from a half to three-fourths of a mile, and is stated by the commissioner to be, beyond doubt, a very abundant and extensive gold-field, equal in extent and production to the *Turon*. The chief diggings, however, have been carried on in the tributary creeks on the tableland, 1,500 feet above the valley, and where the water, though very abundant, could be kept down without so much difficulty as in the valley: there the production has been as great, in proportion to the number of

miners, as in any other gold-field.† One party obtained 3 lbs.-weight of gold the day after the licenses were issued. Another obtained 45 oz. between breakfast and dinner. The average earnings of each individual were said to be 20s. a-day.

At *Mungarlow River*, 200 persons were hard at work with varying success. It is supposed that this river and its tributaries, through an extent of fifty miles, will ultimately be found profitable.

The *Brisbane Downs*, *Maneroo District*, (county *St. Vincent*), in which the *Braidwood* diggings are situated, consist of a series of gentle undulations—diversified hill and dale, lightly timbered, and abounding in water. The *Maneroo Plains*, at the foot of the great *Warragong Chain*, contain some of the loftiest peaks of the *Australian Alps*, which are always covered with snow. Nearly the whole of the *Braidwood* neighbourhood is of granite formation, and gold is disseminated in most of the hills around.

Major's Creek, in this district, is a sluggish stream, making its way with difficulty down a narrow flat, and presenting no difference in appearance from hundreds of other valleys in the colony. The surface is a fertile alluvium, varying in depth from five to fifteen feet, in some parts of which gold is sparingly found; when this is removed, granite boulders and crushed granite appears: in this latter, a deep yellow gold, generally granular, occasionally spiral and unabraded by water, is found. There is nothing mixed with this broken granite but the short filaments or grains of metal. *Bell's Creek* presents the same characteristics. At *Araluen* the gold is obtained near the surface. The beautiful plain where these streams flow appears surrounded on all sides by mountains.

The *Rev. W. B. Clarke* examined the features of the country between the dividing range or eastern limit of the *Maneroo* highlands and the coast of the county of *Auckland*. The east border of the main coast ranges is marked by a series of depressions or passes, overlooked by high peaks where the ridge divides the waters of the *Murrumbidgee* and *Snowy* rivers from those of the maritime counties. This ridge, at the points of depression, may be stepped across in from six to nine paces. The descent through these passes is very steep, and rendered more difficult of transit by stockmen and shepherds from the head waters of several rivers or streams, such as the *Jenoa*,

* Commissioner Richard Bligh's Report, with Map, &c.; in *Parl. Papers*, 25th February, 1853, pp. 123—5.

† Report of *J. R. Hardy*, Gold Commissioner

Towamba, Bemboka, and Brogo, being directed along these fissured lines caused by volcanic action in the schistose rocks.

In the alpine region around Maneroo the predominant colour of the granite is gray, with patches of a reddish or ferruginous hue; the felspar varies from small grains to considerable crystals; the quartz is limpid, and highly crystalline; the mica, in small greenish tables. In some places the granite is in a state of decomposition, resulting from exposure at so great an altitude.

In August, within the space of three days, 870 drays left Sydney for the diggings, having an average of three persons to each dray=2,600. In September, the number of licensed diggers in all the gold-fields of New South Wales was supposed to be under 8,000; of these the largest proportion were at the mines north of Sydney—namely, at *Ophir, Tambaroura, Meroo, Hanging Rock*, in the neighbourhood of *Peel River*, and *Bingara* on the *Gwydir River*. At *Ophir*, including the miners on Mr. Wentworth's property, there were about 200, whose earnings averaged 10s. to 60s. a-day. At *Turon*, including *Sofala*, where, at one time, there were 10,000 persons, now there were only 1,200, earning 15s. to 80s. On the *Tambaroura*, 1,000; and on the *Meroo*, including *Louisa Creek*, and the site of the Great Nugget Vein, 1,500, earning 20s. each, on an average, per diem. At the *Hanging Rock*, 200, doing well, some getting 20 oz. a-day; at *Bingara*, about 300. West of Sydney—200 on the *Abercrombie*; 100 at *Havilah*, on the *Campbell*. In the south, the chief locality, *Aratuen Valley*, had its numbers reduced from 2,000 to 500; earnings ranging from 15s. to 60s. per diem.

A beneficial result ensued from this abatement of the gold fever: the high prices given for provisions at the mines, where it was not considered exorbitant to pay 45s. per 100 lbs. of flour; and 12s. 6d. a bushel for maize;—the importation of several thousand tons of flour from the United States, and the expanding circulating medium of the colony, gave great encouragement to agriculture: large quantities of fresh land were sown with corn, in 1852:—all sorts of business increased; and there was general prosperity among every class of the community. Shops in Sydney, in first-rate situations, gave a rent of £700, £800, and even £1,000 a-year; a good family house, £300 a-year; a five-roomed cottage, 50s. to 80s. a week. Building was carried on briskly, in

the superior style of architecture, and with the excellent stone for which Sydney is remarkable.

Quarrymen and sawyers earned 20s., and mechanics 11s. to 14s. a-day. Sawn timber rose in price from 8s. to 50s. per 100 feet; bricks, from 40s. to 160s. per 1,000; hewn stone, from 4d. and 5d. to 2s. and 2s. 6d. per foot. Seamen employed in the coasting traffic between Sydney, Melbourne, and other adjacent ports, obtained £5 a-week as wages.

The great demand for labour naturally caused, here as well as at Melbourne, numerous desertions of seamen: indeed Sydney was always a strong temptation to sailors; but, by the vigilance of the governor, the evil was greatly checked by the middle of the year 1852, as will be seen by the following statement of the number of deserters; the warrants issued for their apprehension; and the number captured:—

Years.	Deserters.	Warrants Issued.	Number Apprehended.	By Water Police.	By General Police.
1849*	358	144	336	313	23
1850	456	160	266	244	22
1851	599	242	338	267	71
1852 Jan. to May incl.)	115	78	231	123	108

The effect of the sudden discovery of gold deranged for a time the monetary transactions of the two colonies, and obliged the banks to make larger remittances of their capital to London, to meet drafts against gold at 55s. per oz. in New South Wales; and 50s. in Victoria. The exchange on England soon fell to a discount—nine to ten per cent—and coin was imported to the amount of nearly five million sterling,† to meet the demand for current money.

The cry for a mint as a means of restoring the balance of trade was very general: a bank of England note for £100 only represented £90 in Sydney, or sometimes only £80 in Melbourne; the banks sold their drafts at 6½ per cent. bought bills against the hypothecation of produce at 8 per cent. discount and did a thriving business, by advancing cash (40s. to 50s. an oz.) on gold consigned to their care. The crown, after due

* Parl. Papers, 28th February, 1853, p. 142—3.

† The export of gold from England to Australia, even from Jan. to Nov. 12th, 1853, was £3,726,655.

investigation, and a report from the distinguished Sir William Herschell, the master of the mint, sanctioned the formation of a branch of that establishment at Sydney; and, in November, 1852, the governor-general remitted £10,000 to England, to meet the cost of machinery for the purpose of assaying and coining on the spot sovereigns, or whatever current money may be deemed advisable.

When the certainty of the existence of gold in Australia became fully established in England, numerous joint-stock companies were formed, to reap some of the golden harvest. In vain people were warned that these companies were but "bubbles"—that no dividend could accrue from such speculations; the public refused to profit by the experience derivable from the Californian companies, and eagerly swallowed every falsehood—such, for instance, as the following, which was put forth in the public papers:—

"Australia.—Some time since a little party of gentlemen, holding high government appointments, obtained leave of absence to visit Australia, with the view of exploring certain districts which the colonial office had already been informed were singularly enriched with the precious metals. This little band, accompanied by an intelligent mineralogist and geologist, and armed with the requisite power and the highest official introduction, appears to have been indefatigable in their undertaking. We are now informed that their reports fully confirm the first advices, and that *The London and Liverpool Australian Mining and Steaming Company*, just announced, is a commercial result of the news just received. It would further appear that the principle with which the adventurers commenced, the tie of a common interest, is to remain intact, and the effective mining staff about to sail forthwith are to have their services secured by a like agreement with the company in England."

This invention, about the "gentlemen holding high government appointments" profiting by the information obtained by the secretary of state for the colonies, and "armed with the requisite power and highest official introductions," might have been thought too absurd for even a gullible public; but there was no lie which, in the desire to become suddenly rich, many were not ready to swallow. Australian land was sold in London, at thousands of pounds per acre, on the mere faith that gold might be found thereon: and some hundreds of thousands were subscribed, by which none but a few crafty adventurers, and characterless

jobbers could ever benefit.* That companies for crushing auriferous quartz may, by economy and good management, become a source of profit, is undoubtedly true; for such enterprises are beyond the reach of individual efforts. Some of the quartz examined yielded startling results: 40 oz. from a vein in the *Lower Turon* gave 12 dwts. of gold, or at the rate of £1,200 per ton; another specimen, in which no gold was visible to the unaided eye, was worth £523 per ton, and there were said to be hundreds of tons equally rich. Joint-stock bodies could alone carry on the operations requisite for long continued and extensive speculations.

In December, the Legislative Council passed an act (16 Vic. No. 27) to "regulate the carrying of fire-arms," as it was found that some of the persons at the diggings always went armed, and were in the habit of using deadly weapons on the slightest provocation. This led others in self-defence to the adoption of a similar un-English habit, and hence the necessity for a general prohibition. Offences against the act were made a misdemeanour, punishable with imprisonment for any term not exceeding two years, with hard labour. Any one carrying fire-arms in the city of Sydney, except by lawful authority, was liable to a pecuniary fine. A similar act was passed in the province of Victoria.

About this period the Colonial Legislature passed a gold enactment, exacting double fees from those who were not British subjects—empowering the executive to grant leases or licenses of auriferous tracts for twenty-one years—and giving power to suspend pastoral leases or licenses so far as might be necessary to mining operations in the "runs" to which existing licenses pertain. Half-licenses to be permitted after the 15th of the month.

The diggers in both colonies began to protest against the exactment of a high license fee; they asked why their occupation should be taxed more than that of other labourers or mechanics, more especially since the product of their industry contributed so largely to the general welfare; resistance was threatened, but they offered to pay a lower fee, and proposed 10s. a-month.

On the 2nd of December, Mr. Arthur Todd Holroyd, an active and intelligent of the "gold" bubbles; but to every application he replied, "to take money under such pretences was little better than a public robbery."

* Shares to the value of £1,500 or money to that amount, and upwards were offered to the writer if he would only let his name appear as a director in some

member of the Legislative Council for the western boroughs of Bathurst, &c., moved, on behalf of 2,000 miners at the *Turon*, that a select committee be appointed to "inquire into the working and tendency of the gold regulations upon the mining and national interests of the colony." The motion was opposed by Mr. Wentworth and other influential and independent members, and withdrawn. The money derived from the licenses at the rate of 30s. a-month was included under the term territorial or crown revenue, and the lords of the treasury in England had the sole disposal of the fund, but the colonists were much gratified by the announcement from Sir John Pakington, her majesty's secretary of state for the colonies, that the Crown surrendered the appropriation of the territorial revenue, including the proceeds accruing from the sale of lands, as well as those arising from gold licenses, and other items, to the Legislative Councils of New South Wales and Victoria, after each council had secured whatever permanent charges might have been already placed on it. This sound policy removed a source of constant bickering between the representatives of the queen and the Colonial Legislative Assemblies, and the timely concession was received with joyful acclamation at Sydney and at Melbourne.

The number of licenses to dig and search for gold was, during the four quarters, as follows:—

1852.	On Crown Lands, at 30s a Month.	On Private Lands, at 15s. per Month.	Total Licenses.
1st Quarter .	9,669	2,166	11,835
2nd " .	7,793	1,609	9,402
3rd " .	5,738	1,114	6,852
4th " .	5,300	1,520	6,820
Total . .	28,500	6,409	34,909*

If the total for the year be divided by twelve, it will show that the average monthly number of licensed diggers was under 3,000. There were, however, an inconsiderable number who eluded the gold commissioners, and paid no licenses. The yield of the New South Wales gold-fields, for 1852, is

* See Parl. Papers, February 28th, and August 16th, 1853. Mr. G. A. Lloyd gives the number of licenses for the year at 22,500, and finds some calculations thereon; but his basis is evidently incorrect.

† There was by estimate on hand in Sydney, 31st December, 1852, 230,000 oz. It is probable that the whole yield to this date was about 800,000 oz.

to some extent shown in the amounts transmitted by the escorts and mail to Sydney, viz. :—

Western Escort, oz.	133,207	Mail	29,120
Southern "	47,519	"	9,176
Northern "	10,970	"	3,868
Total . oz.	191,696		42,164

Assuming the quantity brought into Sydney by escort to be the produce of New South Wales, and the diggers at 3,000, it would give an annual remuneration for each of 92 oz., at 70s. per oz. = £322.

The known export from Sydney during 1852 was 962,873† oz., of which a considerable portion must have been forwarded from Victoria.‡ The export for 1851 (from May to December) was 144,120 oz.§ Total for both years, 1,106,993 oz., valued at £3,874,475 sterling. The colonial price fluctuated from 62s. in January, to 70s. 9d. per oz. at the close of the year.

The immigration was far less than that of Victoria; during 1852 the statistics were—

	United Kingdom.	Australian Colonies.	Other Countries.
Arrived from	6,443	9,886	5,487
Departed to	478	13,511	948
Total Arrivals	21,816	Departures, 14,937	

(See Appendix)

Among the arrivals were numerous "Yankees" from California; about 200 were employed on the *Turon* river in December, and they are described by an eye-witness as sober, industrious, steady, quiet, intelligent, and, as a body, exemplary in their conduct. Some Chinese were introduced, and found very useful; industrious, frugal, sober, quiet, and skilful, they were ready to do anything, and adequate to whatever they undertook; their honesty (questionable in their native country) was here noticeable; one of them found a cheque in the bush, and delivered it up to the police. As gardeners they are unrivalled, but even as shepherds—to them a novel occupation—they soon evinced considerable adroitness.

The large number of passengers embarking from England for the gold-fields caused the laying on some of the finest ships in our merchant service; one deserves here special mention. The *Marco Polo* sailing-ship made

† Mr. E. Khull, a Melbourne bullion-broker, gives the export from Victoria, "shipped per customs' return, 280,599; by private hand, 341,739; estimated in addition to above, 100,000"=722,328 oz.

§ Another statement gives it at 142,975 oz.; the lesser quantity is on the authority of a respected gold-broker at Sydney, George A. Lloyd.

the outward passage, *viâ* Cape of Good Hope, in sixty-eight, and the homeward, *viâ* Cape Horn, in seventy-five days. Going out she sailed from the parallel of the Cape of Good Hope to Port Phillip in twenty-three days. During the voyage her run for three successive days was 315, 318, and 306 miles. This fine clipper beat the *Australian* paddle-wheel steamer from England; the voyage out and home round the world, was made in the short space of five months and twenty-one days. That immense screw-steamer, the *Great Britain*, made a tolerable fair voyage; her run from the Cape of Good Hope to Melbourne occupied thirty-five days. A large number of emigrants were on board, of whom only one died on the passage. The *General Screw Steam Ship Company* placed several of their fine and well-conducted vessels on the Australian line, and the ocean between England and the Antipodes, a distance of nearly 14,000 miles, was almost bridged over by all sorts of navigable craft. Some of the traders had valuable freights to England; for instance, the *Australian* steamer had on board 8½ tons, or 222,293 oz. of gold, valued at nearly £800,000, independent of considerable sums in the hands of a large number of passengers. The gold was sewed up in leathern bags and sealed; then placed in strong cedar boxes, screwed down, and sealed. The *Australian* had also a quantity of rich copper ore from South Australia; a pretty full cargo of wool and tallow from New South Wales, and on her way home she received 100 tons of sugar at the Mauritius.

Previous to resuming the record of proceedings at Victoria, it is necessary to advert to *South Australia*, which cannot yet be classified in the list of gold colonies. In August, 1852, it was announced that an auriferous site had been discovered near the village of Echunga, in the Mount Barker range of hills, twenty-three miles distant from Adelaide. The gold was found in very small quantities, and over an extremely limited area, in a detritus of sand, quartz, and ironstone, resting immediately on clay, with a substratum of sandstone; but there were no basaltic or trap rocks, which generally exist in gold districts. No trap, indeed, is to be found nearer than 150 miles to the north-east of Adelaide. The metal, obtained by washing the surface soil, was more stringy than that of Mount Alexander,

with accompaniments of iron and silver, but perfectly free from copper. A country of similar formation extends for a considerable distance to the north, and stretches away to the south, towards Encounter Bay and Cape Jervis; probably, also, to Kangaroo Island.

On the announcement of gold by a person named Chapman, who claimed the reward of £1,000 offered by the local government for its discovery, there was a great rush from Adelaide, and sixty licenses were at once issued. In September, more licenses were granted; but many returned to Adelaide, disappointed in their hope of becoming immediately possessed of riches. A few sunk pits: one party penetrated to a depth of thirty-five feet without reaching the bottom of the clay stratum; and another reached a steatitic white clay; but neither obtained any gold. Up to the end of September, 296 licenses were issued, but continued heavy rains materially interfered with the operations of the diggers, who, however, procured a little gold.

In October, about 400 people had pitched their tents at Echunga; several families of respectability arrived; and the presence of well-dressed women and children gave a pleasing feature to the diggers, who were characterized by decorum and sobriety. One nugget, weighing an ounce and a-half, was found seven feet below the surface; and assistant gold-commissioner Murray reported (2nd October, 1852)—“many almost as large were discovered among the small gold, by different persons, during the last week.”* Towards the end of October, 700 licenses had altogether been taken out, but success was small and very variable. Specks of gold were found in a few places on the surface; but several shafts, sank down in the rock, yielded none. One of these passed eighty feet, entirely through the plastic earth, down to a white, porous, brittle, silicious formation, easily friable, by pressure beneath the fingers, into coarse-grained particles. At the close of the month, about 200 persons quitted the diggings.

In December, only eighty-seven licences were applied for, making, with 1,011 issued in August, September, October, and November, 1,098. Every creek and fiat had been tried, and failed in the expected yield. The diggers complained of the heavy license-fee (30s.), which they were required to pay in searching for a precious commo-

* Parl. Papers, 16th August, 1853, p. 133.

dity, and petitioned for its diminution to 10s. a month, which they declared themselves ready to contribute, until they might find a gold-field which would reward their labour, when they would be enabled to give a larger sum for their license to dig. Lieutenant-governor Young refused to comply with the prayer of the petitioners, who consequently left Echunga, and the search has not since been resumed. Whether South Australia be or be not an auriferous country is still open to investigation: the same remark applies to Western Australia, where, it is said, there are small particles of gold. Both these provinces are, however, rich in other minerals, such as copper, lead, &c.

The year 1853 opened well at Victoria. Notwithstanding the absence from the diggings of many labourers at the festive season—which Englishmen delight to celebrate in every part of the world—the licenses issued were—

Districts.	January.	February.
Ballarat (incl. Creswick's Creek)	3,720	5,105
Mt. Alexander and adjoining dis.	23,441	25,838
Ovens River district	6,112	6,477
Total number	33,273	37,420

The fees derived by government from these licenses amounted to £110,561.

The gold transmitted by government escort to Melbourne, during the above months, was—from Ballarat, 36,122; Mount Alexander district, 105,562; Ovens River district, 72,617 = 250,423 oz. Some gold was conveyed from the Ovens diggings to Sydney, New South Wales, by a private escort company: the quantity is supposed to have been from ten to twelve thousand ounces weekly, which would show a large yield for this district. The Victoria private escort brought also to Melbourne, during January and February, from Forest Creek, 77,130; and from Bendigo, 105,175 = 182,305, which, with the government escort, gives 432,728 oz. Allowing 10,000 oz. sent to Sydney weekly, for eight weeks, we must add 80,000 more; showing a total yield from the Victoria mines of at least 512,728 oz.,* which, at 70s. per oz., gives £1,794,548, for fifty-nine days, or at the

* Some of this gold may have been collected in December, or even in November: the licenses granted for these months respectively, were 35,469, and 35,575.

rate of £30,000 a-day. The average number of miners for January and February, was 35,345; so that the earning for each was about sixteen shillings a-day.

At Ballarat there were six or seven thousand persons, including women and children. At Mount Alexander and Bendigo districts, the diggers were distributed over Fryers, Forest, and Barker Creeks. At Mount Koorong, fifty miles to the north of Bendigo, between the *Avoca* and the *Loddon*, two gullies, of limited extent, were discovered, yielding gold in considerable abundance, and almost on the surface: between five and six hundred miners found profitable employment. *Creswick's Creek* was frequented by a small number of diggers, with moderate success. The May-day Hills, in the Ovens district, termed the "border diggings," were at this period popular, in consequence of new *placers* being discovered at *Reid's* and *Spring Creeks*. The district between Yass and Albury (see Map) was spoken of as an immense gold-mine, the spots more particularly mentioned being the Black Range Mountains, four or five miles from Albury, and Adelong Creek, near Gundegai, on the frontier between Victoria and New South Wales. The neighbourhood of Lake Omeo (see p. 253) was also said to be very rich. On January 7th, thirty-eight drays left Melbourne for the Ovens district, with, on an average, four persons to each dray, all determined not to return until they had realized an ample independence. *Reid's Creek* was ascertained to be auriferous throughout its length of sixteen miles. The produce was derived from surface washing, the gold being as fine as gunpowder, and very pure.

With regard to *Spring Creek*, its bed was entirely of granite, the surface soil in general a dark loam; in some places, a red gravel. The average depth of the pits dug by the miners was 8 to 10 feet; in the dry diggings, 12 to 14 feet; and at the Upper Creek, 15 to 20 feet. Tunnelling was universally practised at the dry diggings; the compact nature of the soil facilitating the process. The gold, remarkably fine, and of a deep bright, rich colour, was found immediately above the bed rock, universally in a stratum of loose decomposed granite; but it required care and toil to separate the minute particles of metal, which were lighter than fine sand; the black and apparently iron dust blown from the gold was not affected by the magnet. Some of the claims

(8 feet by 16) turned out very rich: one, worked by soldiers, yielded 138 lbs.; another, occupied by a Sydney party, 93 lbs.; several yielded 20 or 30 lbs.; it was considered a poor claim that did not furnish over 3 lbs. of gold. Towards the close of January, it was supposed this creek was worked out; but owing to the extreme fineness of the dust, a considerable quantity must have remained in the soil.

At the junction of *Yackindandah* with *Gap Creek*, about seven miles from Spring Creek, gold was found by sinking deep holes in the centre of the creek, through a rich black alluvial deposit—a work of great labour, and requiring not less than six or eight men, on account of the quantity of water to be baled out, and the necessity of erecting strong frame-work, to prevent the sides of the pits from falling in. In the Ovens district, generally speaking, there were good returns obtained by about 5,000 diggers. One party procured 300 oz. within a month; others, in a longer period, 500 oz. A group of Germans are stated to have given in to the commissioner 120 lbs. weight.

At Canadian Gully, (Ballarat), four miners found, at about fifty feet from the surface, two masses of nearly pure gold, one weighing 77 lb. 3oz., the other 69 lb. 6 oz. This caused a great rush to the neighbourhood. A promising gully was opened at Creswick's Creek, and new diggings at Wahaup, where 1,000 men temporarily found employment.

On the 12th of February many hastened from different quarters to the *Loddon* (forty miles from Fryer's Creek), where a man had obtained 6 lbs. weight of gold, as the fruit of ten days' toil. Workings were discovered at Kerang, about twelve miles south-west of Koorong, and still further to the south-west in Mount Mollygall range, which afforded good promise, but unfortunately there was a want of water. New openings of small extent were commenced at *Winters's Flat*, in the vicinity of Boninyong township. A marked change was at this period noticed in the habits and manners of the miners; the feverish haste which characterized them at the outset was much less observable; their dwellings, whether huts or tents, instead of being closely huddled together on the very edge of the workings, were distributed over the adjacent hills, for the sake of greater privacy, comfort, and convenience; there was more science, general intelligence, and perseverance manifested; and the large pro-

portion of women and children gave a more domestic aspect, and an appearance of more settled occupation than previously existed. Provisions were plentiful, considerably reduced in price, and no unusual amount of sickness prevailed. An improvement was manifested in some respects in the character of the governmental establishments, and in the subordinate arrangements for carrying on the duties of the field. The governmental establishments connected with the gold-fields were large;* it included a chief commissioner (£1,500 per annum); thirty-three resident, senior and junior assistant-commissioners, at salaries varying from £400 to £700 per annum, with rations and forage for one horse; three surgeons and coroners (£350 to £400 each); three postmasters (£250 to £300); forty clerks to commissioners (£150 to £400); five store-keepers (£150 to £300); three tent-keepers (8s. a-day); deputy-sheriff (£500); clerk to ditto (£150); gaoler (£250); bailiff (£300); and two turnkeys (12s. a-day); four police magistrates (£500); five clerks to bench (£150); two inspectors of the police (£600); two acting ditto (£400); fifteen sub-inspectors (£300). *Mounted police*.—One serjeant-major, 13s.; six serjeants, 12s. each; seventeen corporals, 9s.; 134 troopers, 8s. *Foot police*, twenty-one serjeants, 12s.; 280 constables, 8s.; troops of the line, 110 privates, one drummer, four corporals, four serjeants, one ensign, one lieutenant, and one captain, all with extra allowances, varying from 1s. to 7s. 6d. a-day. *Ecclesiastical*.—Two clergymen—church of England; two church of Scotland; two Wesleyan (£300 each). *Treasury offices*.—A gold-receiver (£600); sub-ditto (£500); six clerks (£250 to £300 each). *Road gangs*.—Fifty-six overseers, eighteen carpenters, four blacksmiths, four strikers, one mason, two quarrymen, three time-keepers, two store-keepers, 1,347 labourers; these receive 8s. to 10s. a-day; the carpenters, 12s. to 20s.; blacksmiths, 20s. to 22s.; overseers, &c., 12s. 6d. to 15s. a-day each. All the above-named classes preceding the ecclesiastical and treasury received, in addition to their salaries and pay, rations at the public expense. The expenditure of the police for 1852 was £60,554; the estimate proposed by the governor for 1853 was £339,179; the expenditure authorized by the appropriation act of the local legislature was as follows:—

* The patronage thus obtained was enormous. Parl. Papers, 16th August, 1823, p. 87.

One chief commissioner of police at 1,200*l.* per annum, £1,200; five clerks, one at 400*l.*, two at 300*l.*, and two at 200*l.* each per annum, £1,400; one chief inspector at 900*l.* per annum, £900; one paymaster at 700*l.* per annum, £700; four district inspectors at 600*l.* each per annum, £2,400; twenty sub-inspectors: ten at 400*l.* each per annum, and ten at 330*l.* each per annum, £7,000; one studmaster at 600*l.* per annum, £600; one veterinary surgeon at 300*l.* per annum, £300; two serjeant-majors of mounted police at 13*s.* per day, £474 10*s.*; thirty-five serjeants at 10*s.* per day, £6,387 10*s.*; 100 cadets at 8*s.* per day, £14,600; 300 constables at 8*s.* per day, £43,800; 50 serjeants of foot police at 10*s.*, £9,125; 200 constables at 10*s.*, £36,500; 300 constables at 8*s.*, £43,800; two armourers at 15*s.*, £547 10*s.*; two saddlers at 14*s.*, £511; two farriers at 12*s.*, £438; two female searchers at 30*l.* per annum, £60. Detective police:—two officers at 350*l.* each per annum, £700; fifty men at 250*l.*, £12,500; amount authorized for pay of police force, £183,943 10*s.*; contingencies, £74,550: total, £258,493 10*s.*

To provide for the speedy administration of justice, a circuit of the supreme court of the colony was held on the 9th of February, at Castlemaine, Forest Creek, for the adjudication of offences committed at the diggings since the previous circuit. Fifty-three prisoners were tried—one, for shooting with intent to do bodily harm; two, robbery with violence; fifteen, robbing in company; two, assault with intent to rob; six, stealing in a dwelling; one, burglary; eleven, larceny; five, assault; four, horse-stealing; and the remainder were minor offences. Twenty-two of the accused were convicted,* eleven acquitted, six discharged for non-attendance of witnesses, and fourteen remanded to next sessions.

At the preceding circuit on the 9th of December, 1852, there were forty prisoners for trial; among these were—one, murder; one, manslaughter; one, shooting with intent, &c.; seven, robbery; four, assault; eight, horse-stealing; nine, larceny. Of the accused, twenty-five were convicted, three acquitted, two discharged, and ten not tried on account of non-attendance of witnesses, and other causes. Considering that about 50,000 persons, of all classes and characters, were collected at the mines, the result does not exhibit a large amount of crime. On this point, Lieutenant-governor Latrobe, writing to the secretary of state towards the close of the year 1852 (despatch, dated 29th November), says—

“I am justified in saying that general good order prevails throughout the gold-fields, and that there is

* The sentences were labour on the public roads for periods varying from eighteen months to twelve years, and imprisonment from three to twenty months.

† Parl. Papers, 16th August, 1853, p. 55.

every disposition among the great bulk of the miners to yield ready obedience to the law, and to the regulations laid down by government, as well as to look to the authorities for such measures of protection as can be afforded. If these do not find on all occasions the degree of readiness which might be desirable, to give judicious and timely information, or to render the assistance requisite for the prompt repression of disorder, it is, I am assured, less to be attributed to any real indisposition to assist than to the earnestness with which the main object of their occupation of the ground is pursued, and to a disinclination to turn aside, unless it be absolutely necessary, to perform any duty which may interfere with individual schemes or interests, and perhaps involve a temporary withdrawal from the field, by attendance as witnesses, at the supreme court more especially, which must entail ultimately a great expenditure of time and trouble. I may here state, that I found all the arrangements ordered with a view to the proposed holding of a circuit court at Castlemaine, Forest Creek, on the ninth proximo, in a state of forwardness; and I believe no measure will be better calculated to further the ends of justice, and obviate the indisposition to give evidence to which I have adverted, even in grave cases.”

And his excellency further adds—

“I am still enabled to state that the amount of crime and disorder, in so far as these are really known to prevail, is far less in proportion than that remarked among the population in the towns. Take from the list those offences that originate or are connected with and facilitated by the illicit sale of spirits, and horse-stealing, to which it may be conceded the circumstances of the colony afford extraordinary inducements, the number of serious crimes really known to be committed on the gold-fields and in their vicinity, however marked these may be, is comparatively few.”†

This statement, although undoubtedly correct, and in corroboration of opinions previously expressed, is irreconcilable with the enormous outlay proposed on the 3rd of the same month in which the foregoing was written, by the Lieutenant-governor, in his estimates for 1853, for the prevention and punishment of crime among a population whose aggregate number was about 200,000. (1) Administration of justice, £42,280 (a small portion of this may be debited to civil business—say £12,280, the remaining £30,000 to criminal matters). (2) Police establishments, £412,715. (3) Gaol and penal establishments, £94,449. (4) Military (acting chiefly as police), £67,489. Total, £604,651,† or, in other words, an annual taxation of about £3 a head for every man, woman, and child in the colony. What a waste of public money, which might have

† See Parl. Papers, 16th August, 1853, pp. 46—53, for message from Lieutenant-governor to legislative council of Victoria (No. 34) with estimates for the year 1853, dated November 3rd, 1852.

been most usefully employed in the promotion of necessary works—in sanitary measures*—which Melbourne and Geelong were deplorably in need of, and in providing for the reception of valuable immigrants, some of whom were at this very period perishing of destitution in the streets of Melbourne!

But it was not only in police and gaols that the Melbourne authorities were most lavish; the whole governmental estimate of the lieutenant-governor for 1853 (in the message (34) just referred to) was £1,749,042 sterling; this includes £31,879 for the executive and legislative departments; £39,417 for the custom or revenue officers; £57,168 for the *post-office* (which was worse than a nuisance); £62,356 for gold-field commissioners; £42,580 for port and harbour departments; £65,663 for stores and their transport; but it is unnecessary to particularise further. The anticipated income for the year was £1,733,600; the estimated expenditure, £1,749,042; excess of expenditure over even such an extraordinary income, £15,442. And yet, with all this abundance of means for providing an effective administration, the editor of the *London Times* adverts to the “unjustifiable neglect which it would appear characterizes every department of the colonial government,” and cites as one instance the case of “a man who was not drunk but cranky, taken into custody, locked up, and forgotten. No trace of him was found on the watch-house list; and three days afterwards, when the cell was accidentally opened, the prisoner was discovered dead.” With regard to the local police, irrespective of neglect and insolence, it is explicitly stated that several members of the detective force were subsidized by outlaws and vagrants, and received a certain weekly stipend for conniving at their misdeeds.

Mr. Latrobe was considered by impartial colonists as an intelligent and excellent private gentleman; a man of literary tastes, and a good despatch-writer—perhaps too

* Sale of town lands in Melbourne up to this date, about £150,000; in Geelong upwards of £75,000. But of these large receipts, there was, in June, for the first time, advanced to the corporation of the city of Melbourne, £10,000, and £6,000 to Geelong, in aid of the town funds, for draining, cleansing, and local improvements.

† Fourteen years ago—on arriving in the province as chief administrator—Mr. Latrobe bought for a small sum twenty acres of land, within a mile of the then town, on which he placed a wooden house brought from England, for his residence; by the augmentation of the chief city, and the increased value of pro-

much inclined to give reasons and make excuses for non-performance of obvious duties. But he was also considered to be deficient in energy and wanting in decision of character; certainly he had no love for public life. A staff of not very efficient officers was much in his way, and an obstacle that one of his temperament was likely to find difficulty in remedying or removing. With less impartial observers, Mr. Latrobe was severely criticized; yet it must be recorded that he always bore willing testimony to the good conduct of the mining population—and had he but employed some of the immense sums of money which were lying idle in the local treasury, in providing for the houseless immigrants, in opening public lands for sale, and in making traversible roads to the gold-fields, he would have escaped most of the censure which has been cast on his government. The attempt to double the license-fee of 30s. a-month, and its subsequent sudden abolition, instead of reduction to 10s. a-month, was certainly injudicious, especially after the enormous outlay which was being incurred on the anticipation of an income of about half-a-million sterling per annum, from the issue of these very licenses. It should, however, be observed, that as his administration drew to a close, Mr. Latrobe promptly and liberally responded to the public wishes, in the desire for rail-roads and other useful measures, by which some re-actionary feeling was created in his favour: I believe, however, the strongest political opponents cannot accuse him of tyranny, corruption,† or favouritism; and when freed, in July 1851, from the control of governor Fitzroy, he became overwhelmed by the magnitude and unprecedentedness of the circumstances which the gold-fever created: he doubtless conscientiously acted according to the best of his ability, and in the fulfilment of what (in some respects erroneously) he deemed his duty to the Crown.

The unfeeling—un-English conduct of the party, this land became of great value—some say to the amount of £70,000—but Mr. Latrobe's friends deny that this was a reason for his keeping back the waste land from public auction. On the other hand, the opponents of the local government, at a public meeting in Melbourne, asserted that it was the policy of the authorities, who were nearly all proprietors of land, or squatters with a right of pre-emption over their extensive runs at the rate of 20s. per acre—(three of whom held a million acres at a rental of £90 per acre)—to enhance territorial property by refusing to put up to public auction some of the sixty million acres which the colony con-

local authorities to the unfortunate immigrants, is thus described by an eye-witness :*

"I will now tell you what an emigrant may expect on landing—say a man, his wife, and family, with 5*l.* and no tent (the case I am going to make up is not one in 100, but 99 out of 100). He lands, and finds the whole of his money gone for conveyance of himself and family ashore. He sits down on his boxes, debating what he shall do for the best. He hears he can get work on the roads at 10*s.* a-day, or if he's a stonemason, carpenter, or blacksmith, his prospects are even better—ready employment at 25*s.* a-day. This revives him. He looks around and sees a waste sandy desert, which, from the reeds, is a bog in winter, and close to the sea. He therefore sets to work, opens his boxes, gets out sheets, blankets, table-cloths, gowns, handkerchiefs, &c., and, while his wife sews them together, he gets some sticks and manages to make what he calls a tent or cover from the weather. He then takes a seat by the roadside, and sells some of his things at a sad loss, and with the proceeds buys a supper for his family, and the next morning he is off to town to try and get work. He comes back saying he has succeeded; but what is his surprise at finding his tent pulled down, and things scattered about! He asks the cause, and his wife tells him that the government officials have been, and, after abusing her, took, or rather tore down the tent, because, as they said, it was on government land; and also, that if they saw them pick up any sticks again, dead and rotting although they might be on the ground, they should be fined 5*l.*, or a month's imprisonment, and this, too, where firewood is at 2*l.* and 3*l.* a-load. What does he then do? Why, perhaps, he curses a-bit, and then packs up, carries, and drags his goods on to Melbourne; sells some more, and then goes to a government office for permission to pitch his tent on what is called 'Canvas Town,' and pays the government 5*s.* a-week rent. Away he goes and pitches his tent, goes to work, and when he returns he finds his tent again in confusion. He hears from his wife that she, finding the ground dirty and very dusty, and thinking to make the tent more comfortable, laid down some planks in the shape of box-lids, &c., when, lo and behold! up comes a government official, and orders her to take up the boards, as they were not allowed to board the tents."

"At the present moment typhus fever and dysentery are raging among the 6,000 tented inhabitants of Canvas Town, and in most cases producing fatal effects. A little girl I know, who died of sun-stroke during a hot wind. Four died the same day. They were struck in the tents near to her. The doctor who attended her said that he should give up attending persons in tents, as nearly all cases proved fatal; and yet government, after squeezing out 5*s.* a-week for a little piece of dirty, useless land, lying near a swamp, won't allow the poor people either to

put on a wooden roof to keep the heat and wet out, or a wooden floor to rest their beds on and keep out the dust."

"Talking of tents, there are some queer ones, I can assure you. The first I had was a calico one, about six feet by eight feet, in which I could not stand up. This cost 2*l.* 12*s.* 6*d.* In this place four, and often six, slept on the ground, while our boxes remained outside exposed to the wind and rain, which spoilt all their contents. This tent was anything but waterproof, and when it did rain it was one of the finest shower-baths I was ever in, and many a cold night have I lain in sop. One little tent near me I have named the tombstone, from its resemblance to that structure. It belongs to a young man who, disgusted, is returning to England. Thousands would follow him if they could. It measures, length four feet, breadth two feet, height two feet. When he turns in, half his legs stick out at the door, which has a very droll effect."

As to the Melbourne post-office, it was a disgrace to the British character; there was not merely neglect, there must have been positively a large and wilful destruction of letters.† A correspondent thus describes it in 1853, when there had been full time to remedy any unforeseen pressure:—

"So badly regulated a place I believe does not exist in the world. To get to the window for a letter takes at least two hours, and then you must fight against a crowd as rough and large as on a boxing-night at the Royal Vic.; and the great difficulty is to get out again. All this could be set to rights by making a barrier; but no, the pig-headed government won't do it. Hundreds and hundreds of letters are lying in the post-office, and the persons to whom they are directed know they are there, but cannot get them. As for the post-offices at the diggings, they are a perfect farce; they take the postage, but the letters never arrive. A lady friend of mine wrote four letters to her husband at the diggings, begging him to return to Melbourne, as their eldest daughter was dying. He not coming, she advertised in the *Argus*, and that he saw, and returned; but, alas! too late. The letters he never received. I wrote three letters to a friend at Sydney; he only received one; the others are not to be found."

Viscount Canning, the post-master-general in London, on being applied to by the author, relative to the total disregard of public duties by the post-master at Victoria, replied that this functionary was not under his control, but *solely subject to the local government at Melbourne*: a fact which fully accounts for the whole proceeding.

tain; and this too at a time when there were several million pounds sterling lying idle as deposits in the banks—while many of the fortunate diggers were squandering in debauchery and extravagance those acquisitions which would have been gladly invested in the soil. My own impression is, that Lieutenant-governor Latrobe is not justly chargeable of acting with a view to his personal advantage; but I reluctantly consider that, in 1852, he allowed his mind to be biassed by those who had a direct pecuniary

interest in maintaining a monopoly of the land; and that the neglect of suffering thousands was a dereliction of Christian duty.

* See *London Times*, Nov. 4, 1853.

† Clerks might be seen walking over floors a foot deep with letters and newspapers; sometimes weeks elapsed after the arrival of a mail from England before the letters were delivered; thousands, however, never reached their destination, although the postage had been paid for their safe transmission.

The commercial interests jeopardized, to say nothing of the social feelings thus disregarded,* may be estimated by the number of vessels at this period in Victoria.

On the 1st of March, there were in Hobson's Bay, 90 vessels, of which 33 were ships, with an aggregate of 24,885 tons—ranging from 1,274 to 400 tons each; 56 barques,† with an aggregate of 18,829 tons: total, 43,714 registered tons. Besides this large mercantile fleet, comprising some of the finest trading vessels in the world, there were in the port of Geelong, at the same time, 23 vessels of various rig, from the *Bourneuf*, of 1,494 tons, to the *Mosquito* schooner, of 35 tons: the aggregate was 8,697 tons. In the basin at Melbourne, there were also 21 barques, brigantines and schooners, with an aggregate of 3,581 tons: giving a grand total for this one harbour, of 57,992 tons, at one and the same period. The desertions were not so numerous as in the previous year, but some large vessels were left unmanned. The *Bourneuf* lost 54 out of 58 men; another, 48 out of 52; and so on.‡ Many ship-owners and merchants in London and Liverpool, could neither communicate with, nor receive intelligence from the captains and supercargoes at Melbourne.

The importance of rapid postal communication, in a commercial point of view, may be further estimated from the fact, that the shipping engaged in the trade of Victoria, during the first half of the year, amounted to 519,941 tons, which, for the whole year, would give 1,039,882, a figure corresponding with that of the port of London in 1817; and yet, but eighteen years had elapsed since the *Yarra Yarra* was a silent stream, over which the exuberant foliage and creepers nearly formed a verdant arch, beneath which the adventurous pioneer might have been seen threading his way to the destined site of Melbourne—a city containing, at the time I am now writing (January, 1854), nearly 100,000 inhabitants.

To resume the mining record. Mr. Berkmyre has prepared a return showing the

Weekly amount of gold-dust brought by escorts into Melbourne, Geelong, Adelaide, and Sydney, from the different gold-fields of Victoria, in the

* There was no want of funds, even from the post-office revenue, to have provided for its proper management. For the first six months of 1851 it amounted to £3,177; for the first six months of 1853, to £10,019. In 1851, there went through the Melbourne post-office, 229,670 letters, and 206,674 newspapers; in 1852, 898,601 letters, and 638,728 newspapers.

weeks ending on the Saturdays of the first four months of 1853; also the weekly produce compared with that of 1852:—

Weeks.	Mount Alexander.	Balla-rat.	Ovens.	Total per week in 1853.	Total per week in 1852.
	oz.	oz.	oz.	oz.	oz.
January 8	52,037	3,931	13,400	69,368	10,957
" 15	29,912	3,967	—	33,879	14,566
" 22	43,718	3,037	—	46,755	12,015
" 29	38,341	3,949	13,729	54,019	16,070
February 5	74,445	3,126	11,665	89,236	11,871
" 12	25,749	3,148	5,475	34,372	11,035
" 19	28,847	3,107	13,696	47,650	11,139
" 26	30,337	5,000	8,782	44,119	21,784
March 5	34,903	4,237	12,950	52,090	12,895
" 12	28,301	4,035	9,370	41,696	12,981
" 19	41,915	3,905	—	45,820	11,082
" 26	29,739	4,429	10,474	44,642	13,408
Total, first } quarter	456,234	47,871	99,541	603,646	159,803
April 2	31,559	5,702	—	37,261	11,359
" 9	25,595	5,799	6,125	37,519	12,881
" 16	9,464	5,08	4,082	18,629	21,129
" 23	32,906	5,888	10,375	49,164	13,820
" 30	12,364	6,307	2,837	21,508	19,726
Total oz..	568,122	76,645	122,960	767,727	238,718

"The apparent produce of gold by escorts in the first four months of this year is 767,727 ounces, or an average of 45,160 ounces per week, while the quantity brought in by escorts during the same time last year was only 238,718 ounces, or an average of 14,042 ounces per week. Hence the average weekly increase during the first 17 weeks (four months) of this year, as compared with the same time last year, is 31,118 ounces, or 221 per cent."

This shows a considerable increase in 1853 over 1852; but it must be remembered that in the latter-named period there were fewer working hands at the mines. The principal gold-fields, in June and July, are seen by the quantity sent by escort to Melbourne, viz., from Mount Alexander and Bendigo, 73,607 and 73,950; Ballarat, 5,061 and 4,811; M'Ivor, 21,458 and 12,156; Ovens, 8,682 and 6,151. Totals, 103,808 and 97,068 oz.; independent of 53,963 oz. brought down by the Melbourne Private Escort Company. It will be observed that the Mount Alexander district still maintained its pre-eminence, and collected the largest number of people around its picturesque sites. Clusters of tents might be seen in every gully between the hills, some of which were covered with lofty *eucalypti*; other elevations, bare to the sum-

† Vessels with three masts, but having the third mast, not square, but schooner-rigged.

‡ The desertions of seamen from Adelaide, although not a gold-field, were very numerous; from July, 1851, to August, 1852, not less than 303 seamen deserted from 70 vessels; of these, 101 were captured.

mit, were crowned with fantastically-shaped rocks, which jutted also from their sides, the whole wearing a sombre hue, and contrasting well with the bright green aspect of neighbouring eminences. Here and there the country seemed like a series of gigantic mole-hills, with heaps of gravel, chalk-pits, and stone-quarries, interspersed with small tents and huts; everything, in the dry season, covered with dust, and conveying the idea of the desert in the vicinity of Suez, or on the southern border of the Red Sea.

Several spots and gullies, on and near the M'Ivor Creek,* where there were at one time 20,000 people collected, gave, for a time, good returns in nuggets and grains; the strata differed from that at other *placers*, it being necessary to sink through three, four, and even five separate bottoms of clay, before coming down to the hard rock, at thirty to fifty feet, where the gold lay; though it was found more or less on each bottom; the washing-stuff was of a yellowish red, and not the bluey-white colour of Forest Creek and Bendigo diggings. Subsequently the M'Ivor was nearly deserted for the *Goulbourn*, twenty-three miles to the north-east; as was also the *Korong*:—at the *Ovens*, labour was steady;—Ballarat, in consequence of some large nuggets being turned up, received an increase of diggers; but at Bendigo a steady certainty was preferred to a doubtful new field. Operations extended for twenty miles along the *Loddon* or *Yarrayne* river—surface-washing in some places—in others “fossicking”—*i.e.*, working abandoned holes, which sometimes proved remunerative.

Gold was said to exist over a large extent of country at *Mount Frankly* or *Wombat*, commonly designated under the name of the “*Jim Crow ranges*”—(a creek of this latter name is tributary to the *Loddon River*.) It is probable that valuable districts, known only to a few, were kept secret, and that rich *placers* are yet open for public working.

An *exploration company* was formed by wealthy citizens at Melbourne and Geelong, who sent out exploring parties to discover auriferous tracts. The *Wardy Yallok* banks, *Anaki Hills*, were tried with but little success; also a range of large iron-stone rocks, south-west of the *Spindella River*, where a kind of limestone is intermixed with boulders of quartz, which are thrown up in a singularly picturesque manner, and called *Stone-Henge*. The company was, however, dissolved, as its proprietors were of opinion

that individual speculators were more likely to find out profitable workings.

At *Whitehorse Gully*, on the Ballarat side of the *Dividing range*, a nugget of about 60 oz. weight was taken, at a depth of fifty-four feet, in a seam of quartz running horizontally beneath a hard conglomerate of slate and quartz blended. The colour and shape of the gold and the fragmentary appearance of the quartz was similar in every respect to the masses found at *Canadian Gully*.† Many sailors acquired fortunes at the mines: for instance, within the space of twelve months, thirty-five seamen lodged £16,241 with the superintendent of the “*Home*,” in *Well's-street*, *London Docks*; the individual earnings ranged from £9-10 to £160 each. The “*Jack tars*” worked very hard, and found fresh mutton and *damper* savoury fare. This latter word meets an English non-colonial reader frequently, and requires explanation. *Damper* consists of flour kneaded with water for two or three minutes, then formed into a cake (somewhat less than two inches thick), which is placed on the hot hearth, beneath the burning ashes, which have been temporarily removed to admit the mass; in half an hour or so, the cake is well baked; and when the ashes are dusted off, ready to be eaten. I have often, when hungry, partaken of damper in the settlers' huts, and found it palatable, though not readily digestible; but with a keen appetite and strong exercise, it is substantial and wholesome food.

That good fortune favoured the few and not the many was abundantly evident at the gold-fields and elsewhere. The unfavourable side of the picture is thus described in a letter from *Fryar's Creek*, dated 2nd April, 1853:—

“We arrived at the diggings ready to commence work on the first day of March, which is now past. We sunk one hole nine feet deep, and it turned out a blank; that occupied five days. We then went to another place, and sunk another hole 23 feet deep, and in the bottom of the hole we got 12½ dwt. of gold; that occupied a fortnight in March. We then drove it, as they call it, and in the other fortnight we obtained 2 oz. of gold, value 7*l.* 10*s.* here, which has all been expended.—They are very strict here; and if you are taken without a license they fine you 5*l.*, or in default of payment, you are sent to work on the roads for one month. The second offence is 15*l.*, and the third offence is 30*l.*, or three months on the roads. There are thousands of dis-

* Also at *Warranga*, 36 miles north of M'Ivor.

† At *Molygall* (*Jones' Creek*), gold was discovered in July by a dray passing over the boggy soil: about 25 lbs. weight were procured here by one party in two days.

appointments here as well as on the Sydney side. Mr. L. and James G. have barely paid expenses since their return, which has been between three and four months, until the last week in March, when they came on a pound weight of gold, and now are doing scarcely anything. Notwithstanding the many fortunate persons we have heard of, there are thousands scarcely earning a livelihood. Everything is very dear: bread, 1s. 6d. the small loaf; flour, 7l. the bag of two cwt.; beef and mutton, 6d. per lb.; sugar, 7d.; tea, 2s. 6d.; common boots, 30s. per pair. There are thousands and tens of thousands of holes deserted here. The way these holes have been made is this—what they commonly call a 'rush':—One person tells a friend that he has done well at such a place, and then there are a thousand round the spot immediately, digging away, and then there are a hundred loiterers about, to see from them that get down first to the bottom—sometimes 20 feet, sometimes 23 feet, and 30 feet—and if the news is favourable they all commence to sink; if not, the place is vacated in one week, and not a soul is to be seen there again. And you would be surprised if you saw this part of the country: holes on the hills and in the flats in every place you can go; and it is dangerous to move about of a night at all. I have come in conversation with some men who have been here six, twelve, and eighteen months, and they have nothing as yet."

There is a sameness in the accounts from all the gold-fields—reports of the productiveness of some spots, and the rush to them from others—complaints of the roads, of the price of provisions, of the inefficiency of police, and neglect of government.

Time and experience changed the operations of the miners from that of mere physical labour to a system necessitating some degree of skill. Gunpowder began to be used to loosen beds of conglomerate from five to ten feet thick, which required to be cut through at the *White Hills* and at *Ballarat*; the simple contrivance of the "cradle," first used for washing the *stuff*, was superseded, to some extent, by different machines that tested larger quantities of earth, and more thoroughly.

Among the various implements invented for crushing rock and pulverizing hard clays—in which the presence of gold is suspected—one simple construction performs three processes at the same time, thus—

"The first compartment of the machine, with its powerful crushers and agitating perforated plates, is intended for the stiff and hard clays, by which, in two or three revolutions, a quantity is reduced to a floating pulp, and flows off through the pipe leading from this part of the machine to the amalgamator, where only that portion of the gold which cannot be detected will be received, all the heavier portions having been detained, in consequence of the formation of the pipe through which it is made to pass off. The second portion of the machine is for the looser earth, and it is so constructed as to allow of nothing leaving it till perfectly worked,

when, by its own motion, it discharges all stones, &c., into the chamber underneath, and is again ready to receive a fresh supply. The compartment underneath the washer is relieved from time, to time, by raising a sluice. The floating matter then passes over a long trough, and at last empties itself into the amalgamator, all solid particles, as before, having been arrested in their passage from the washer, while the action of the machine keeps up a continual supply of water. The third portion of the machine, called the amalgamator, is so constructed as to expose a large surface of silver to the action of the floating matter, and, by means of washers and balls made of wood, renders it impossible for any portion to escape coming in contact with the silver."

The machine is so portable that it may be carried about in a cart; may be worked by two men, by water or by steam, so that several tons of earth can be reduced in one day; and it may be locked up, and the progress of the operation occasionally examined by an inspector.

Another machine for pulverizing, washing, and amalgamating, was exhibited at the *New York Crystal Palace*: its peculiarity consists in the rolling and grinding of two iron balls, weighing together nearly four tons, in an iron basin revolving by steam power, by which an action is produced analogous to that of the pestle and mortar: some of the hardest ores are thereby reduced to an impalpable powder, which is washed by the constant dropping of a small jet of water, and amalgamated by a deposit of quicksilver at the bottom of the basin, heated by a fire beneath it. The whole of the processes usually performed by separate labour at the gold mines are therefore effected simultaneously, at a cost of 12s. per cwt.* But this and the previously mentioned machine, are too complicated and expensive for general use in Australia; when the surface gold has been worked out, and it becomes necessary to crush quartz and other rocks containing auriferous metal, a crusher and amalgamator will become of more importance to the colonists.

Where the flow of water permitted, a sluicing practice was adopted; but all observers agree in condemning the very wasteful mode in which the gold has been sought for, not only from the want of efficient machinery, but from the manner in which the ground was occupied by "claims," there being no law to necessitate a systematic examination and effective working of any given spot.

* Welsh ores are now yielding, by this machine, two oz. of gold: large quantities of this metal may thus be obtained in the United Kingdom.

In some places the work might be termed "colliering." A gully opened on Monday morning might be traversed by Saturday night its entire length, for two miles under ground, at a depth of sixteen feet. Some miners excavated to a considerable depth, and procured gold in large quantities; but the generality of workings were from ten to twenty-five feet.

The usual plan adopted, at the period under review, was to sink shafts or holes 50, 70, or even 100 feet; if a vein be then found, side galleries were driven under it, and the bed containing the gold removed by working from beneath; should the veins prove productive, they are followed, regardless of the surface claims. Sometimes a keen competition arises between two neighbouring parties who shall first sink a shaft down to a vein, so as to undermine the competitor and clear out the precious "dirt" before the rival has reached the level. In work of this nature, as in other descriptions of mining, some boarding is used for the shaft, to prevent the sides falling in, and form supports for the galleries; but the workmanship is very rough, except when a carpenter and blacksmith constitute members of the party.

One of the dangerous incidents connected with tunnelling is thus described by a miner, in a letter to his friend, written from *Dead-Horse Gully*, in 1853: the digger had sunk a hole about seventeen feet, and, as it proved pretty good, he drove a tunnel about forty feet towards the side of the hill. The remainder deserves to be given in the words of the narrator:—

"One day I had been more than usually lucky, so next morning betimes I was stirring, made fast my rope to a tree, and down I went by it hand under hand, lit my slush lamp, and proceeded along the drive on my hands and knees, eager to begin work, and thinking of the big nuggets. You remember I was always celebrated for making small drives. Shading the light with my hand I crawled in. Near the far end I stopped, to avoid crawling through a small pool of water. Casting the light before me to see how the land lay—horror of horrors!—on the other side of the pool I perceived a pair of small glittering grey eyes intently fixed on me, the cold, malignant expression of which forced the warm blood back to my heart with a bound which nearly suffocated me. I knew at once that it was a snake, and a deadly one too. Arching its neck with a hissing noise, it collected itself for the fatal spring; starting back, my head came in contact with the roof of the tunnel, and I fell back stunned and senseless. How long I lay in this state I know not; but when I came to consciousness I at first thought that I was at home in the 'big smoke,' but gradually the truth forced itself upon me. Where was the snake?"

Was I bitten? to the last mental query I cheerfully answered 'No!' for most of these snakes are very deadly, and the bitten parts swell up immediately. On consideration, I remembered that the snake had reared for the spring, so it was clear I had fallen in the nick of time, and the reptile had passed over me; but where was it now? A cold-shudder passed over me when I considered that the snake must still be in the hole, perhaps even within a few feet, watching me with its glassy eyes, or preparing for another spring. I am not easily frightened, as you well know; but for all the gold in Bendigo I would not be in that situation again. How was I to proceed? My only weapon was a driving pick; grasping it, and creeping cautiously along, I heard a noise in front. Was it the snake? I held my breath in fearful suspense, with the sweat of agony moistening my brow. No, it was only some loose stones falling from the roof. I breathed again, and with a forced courage crept stealthily along. Arrived near the mouth of the tunnel, I was again startled at seeing a large carpet-snake (my late tormentor) circling round the bottom of the hole, and gliding half his length up its slippery sides, darting in and out his forked tongue, and slowly moving his head, as if searching for an opening to hide itself. Being concealed in the dark tunnel, I had ample time for deliberation. Evidently I should be able to strike the first blow if I could succeed in reaching the mouth without making a noise. I made up my mind at once, perhaps rashly; I might have done better if I had waited until it was asleep. Muttering a prayer, I crept cautiously forward, but the head of my pick caught against a loose projecting stone, and down came a lot of earth. Cursing my bad luck, I looked to see what effect it would have on the snake. It was evidently aroused, twisting and contorting its body into all sorts of knots and circles, at the same time keeping its piercing glance fixed on the mouth of the tunnel. Darting quickly from my concealment, I nailed the snake to the ground through the neck with my pick. With a hiss of pain it suddenly threw its folds round my leg, and partly drew it towards its head; recovering, I planted my leg firmly, pulled out my bowie-knife with my left hand, and cut the snake in two about a foot from his head; still the slimy body was contracted round my leg, and still the forked tongue was playing in and out, notwithstanding the body was severed in two. I clambered up the side of the hole, with the snake's body still clinging to my leg; when I got to the grass, I again cut the snake in two and unwound it, thanking God for my narrow escape. The snake measured eight feet six inches.* I went home to my tent, and made out the day 'fossicking.' [That is, trying abandoned holes.]

Notwithstanding the immense amount of gold transmitted, under the guard of a few men, over a large extent of wild country, it is creditable that there was only one attempt at plunder. In July, a gang of six well-armed, mounted bush-rangers (three at least of whom were notorious London thieves, dressed as miners),† attacked the

* A snake found at Parammatta measured 27 feet.

† Outside, a blue serge shirt, with a leathern belt for fire-arms, &c.; high jack-boots, and broad brimmed *wide-awake* hat. Beards and mustachios were universal.

M'Ivor Escort. The robbers cut down boughs of trees, stuck them upright by the side of the road, to screen the assailants: placed a large log aslant on the road, to impede the passage of the cart; and when the four mounted troopers in advance reached the spot, a volley of bullets and duck-shot wounded the advance, both men and horses, and also the driver; the officer in charge and the serjeant were then compelled to retreat, and the robbers got possession of the gold: this was equally divided, and each took different roads to Melbourne, where one of them had a house. The vigilance of the police was evaded until the 11th of August, when four were captured, one of whom turned approver; the fifth committed suicide; and the sixth has, as yet, escaped. The remaining three were executed at Melbourne, on the 4th of October. One of them was taken on board the *Madagascar*, about to sail for London. Upwards of £5,000 worth of the gold was recovered.

In July it was estimated, at a rough calculation, there were about 60,000 persons at the gold-fields; but the yield was not in proportion to the number employed. Many were continually moving from one place to another in search of "good-luck." Some were "fossicking;" others were "shepherd-ing"—by which was meant, marking off some claims; watching the result of miners less sparing of labour: if successful, the "shepherds" went to work; if not, they walked off, congratulating themselves on so much toil saved. Gold-digging, unless attended by profitable results, is very disheartening. A considerable number were therefore generally returning, to be replaced by new comers, whose sanguine hopes had not been chilled by continued disappointments; but the wealth of the country—or, in other words, the quantity of its exchangeable and surplus production of gold and of wool,* largely increased.

The progress and state of affairs, at this period, is described by the correspondent of the *London Times* :—

"Public business is altogether neglected, put aside, or slurred over; for though each individual colonist must, in the end, feel and suffer from the consequences of the carelessness and idleness of the public servants, and though complaints, grumblings, and even curses, loud and deep, are neither few nor

* To remove the fears entertained that the gold would injure the wool-trade, it may here be observed, that the shipments of the wool were, in the years ending 5th of July, 1852, 18,657,567 lbs.; 1853, 21,310,294 lbs. Number of bales in 1852, 66,634;

far between; each man is too much occupied with the advancement of his own fortune to waste his time and energy in the correction of evils which affect him only inasmuch as they affect the whole of the community. But whatever individuals can do for and by themselves, for their own advantage, in the first place, and incidentally for the advantage and convenience of others, that is readily and quickly done by the stirring and restless colonist of Australia. Hence arise the strangest contrasts—a jumbling of comforts and discomforts, luxuries and the want of conveniences the most common in old-established and civilized countries, splendour in log-huts, epicurism cheek-by-jowl with starvation, the height of civilization confounded with the lowest depths of barbarism. The colonies have no roads to the diggings; but along the line of swamps, dirt-holes, quartz boulders, and felled trees, which mark the track to the gold-fields, individual enterprise has established hotels which the papers describe as splendid and replete with every convenience. Among the list we mark the 'Glen Lyon Inn,' the 'Pick-and-Shovel Inn,' on the M'Ivor road; the 'Gold-seekers' Inn,' on the Ovens road, near the Fifteen Miles' Creek; the 'Sunbury Inn,' at Jackson's Creek; and the 'Royal Mail Hotel,' at Buningsong. An enterprising hotel-keeper, evidently with an eye to the patronage of the learned professions, advertises the 'Oxford University Hotel' at Castlemain Diggings; and at Bendigo there is a 'stylish' coffee-house called 'the Argus,' and a 'Crystal Palace Hotel.' It is true that the town of Melbourne has not, as yet, been able to afford the cost of a pavement for its streets, and that the Melbournians, like Dickens's dogs in a London fog, wade 'undistinguishable in mire;' but the miry pools, called streets, are on either side lined with shops displaying the richest brocades, the most elaborate carvings, the costliest lace, and all the manifold appliances which even in England are confined to the persons and houses of the upper classes. Gold-diggers' wives—if fortune wills it so—can afford to have London-made pianos, Turkey carpets, rosewood furniture, and silk curtains; but they must huddle all these splendours into tents, sheds, or four-roomed houses. They may wear dresses which a lady mayoress might covet, but they cannot have a servant to cook their dinners."

The immigration of 1852 is given at p. 436; we shall now examine the arrivals at Victoria, by sea, during the first six months of 1853 :—

Months.	Vessels.	Ton-nage.	Passengers.			
			Males.	Females.	Children.	Infants.
January	138	42,517	5,768	1,563	1,301	158
February	122	45,486	4,510	1,491	1,221	159
March . .	163	47,189	5,831	1,433	1,102	115
April . .	198	60,735	8,323	2,159	1,701	172
May . . .	202	62,105	5,502	2,054	1,175	131
June . .	17	46,058	3,669	407	270	16
Totals.	998	304,090	33,603	9,170	6,680	742

Statute adults, 50,185.

in 1853, 76,108; price 1s. 4d. to 1s. 8d. per lb. This increase has occurred despite the immense additional number of sheep slaughtered for the augmented population.—Many flocks were driven into the colony from N. S. Wales—(see next chapter.)

It was estimated that on the 1st of July, 1853, the population of Victoria amounted to 99,200 adult males; 39,702 adult females; and 57,846 children of both sexes=196,745. The inhabitants of Melbourne were about 80,000; of Geelong, 25,000; in other towns and districts, probably 30,000=135,000; leaving for the gold-fields, 61,745; deducting from this, 11,745 for women and children, there would be about 50,000 miners, store-keepers, and others, of whom about 40,000 able-bodied men were actually engaged with the shovel and pick.

If the production of gold for the year be taken at £16,000,000, the average annual earnings of each of the 40,000 would be £400: but as several "lucky hits" were made by a few parties—some of whom obtained sums varying from £20,000 downwards—the individual receipts of the many must have been far below the rate of 10s. for each working day; and as the cost of provisions and other necessaries of life (excepting meat) were generally treble English prices, there were severe privations and many deaths among the miners; and the unrecorded dead not a few; but all engaged in the manufacture, sale, and transit of commodities for the use of the diggers, benefitted by the labours of those industrious men.

The migratory and motley character of the population is worthy of note. Between the 1st of August, 1852, and the same date, 1853, no less than 77,288 adult males arrived in the colony by sea, and about 4,000 overland = 81,288; of these it is estimated there emigrated, 39,000; and remained, 42,000. About 34,000 of the latter went to the gold-fields. Of the above 12,105 arrived *from*, and 12,855 departed *to*, New South Wales; 1,094 *from*, and 12,193 *to*, South Australia; 12,333 *from*, and 11,675 *to*, Van Diemen's Land; 1,316 *from*, and 512 *to*, New Zealand. It appears, therefore, that South Australia and New South Wales were gainers by the great rush of population to Victoria; the influx *from* the adjacent southern colonies was 36,838, the efflux there, 38,235. There was scarcely a nation in Europe that had not, in different proportions, a number of its representatives in Victoria; the thrifty Germans in particular flocked thither; and British colonists from the West, as well as the East—Indies, from Africa and from America, sought wealth, if not a home, in the *El Dorado* of the south.

The financial condition of the colony is shown, during the year ending 30th June,

1853, by the increase as compared with the previous corresponding year:—

Gold, including licenses, (£657,818)	£711,700
Custom's, (commerce)	458,037
Dues, auction and other licenses, postage, &c.	1,275,460
Territorial, incl. land sales (£1,138,922)	1,175,775
	£3,620,972

This large receipt cannot be all considered as revenue, the land sales being, in fact, so much out of capital or stock; but it indicates, nevertheless, a high degree of taxation on 200,000 inhabitants, viz., (excluding the land sale), at the rate of £12 per head; but if it be remembered that for a part of the year the population was below 200,000, we may fairly conclude that the sum paid in twelve months was about £15 by every man, woman, and child in the province.

It was difficult to put a limit on the value of land and house-property in Melbourne, so rapid was the augmentation in population and wealth; a frontage of twenty-five feet, in Bourke-street, let to some Yankees for building at a rent of £1,200 per annum. An Americanized Polish Jew, who arrived about twelve months before, in Victoria, without a shilling, commenced a restaurant or dining-establishment on credit, and succeeded so well, that in August he was in treaty for the purchase of the *Royal Hotel* on the following terms:—£10,000 to present tenant for two years of a lease uncompleted; £1,000 to the owner of property for his consent to exchange; £1,000 a-year rent for two years; £4,500 for five years after; and £5,000 to be spent in improvements. The government wanted to purchase a fine store belonging to a Mr. Degraives, and asked him to name his price—a final figure; it was £85,000, almost the cost of a ducal estate in England.

The land sales which took place indicate the rise in this description of property: town allotments brought from £3,000 to £7,000 per acre; in the country townships, according to distance from Melbourne, from £100 to £1,000 per acre; a small lot at Kyneton, distant fifty-five miles from thence, brought at the rate of £1,440 per acre; other lots in the same township, £162 to £410 per acre. Land near Melbourne, generally speaking, was worth £2,000 per acre, and within a distance of twenty or thirty miles, £50 to £80 per acre. A building lot at the corner of Collins and King-street, with thirty-three feet frontage to the former, and eighty feet nine inches to

the latter, sold for £5,115, or at the rate of £155 per foot; other lots brought also, by auction, prices varying from £50 to £100 per foot. In some places, frontage in the shop-streets sold at the rate of £13 per inch. An allotment, whose value, in 1837, was £50, rose to £4,000 in 1839—collapsed to £400 in 1844—rose again to £4,000 in 1851—and to £15,000 in 1853.* Fifty acres of land near the *Melbourne Benevolent Asylum*, put up for sale in quarter-acre allotments at £75 each, produced altogether £69,693; some of the lots brought £600 each. Building-materials readily sold at 800 per cent. profit; bricks at £10 per thousand (price in England, 42s.); deals at 3s. 6d. the square foot (cost in England, 2s.) To avoid warehouse expense, which was very great, almost everything was sold by auction, in spacious rooms; and as the goods were not "guaranteed," instances of fraud in exporters and dealers came to light. A purchaser, for instance, buying fifty cases of what was advertised as "best brandy—Martell's genuine mark," found sometimes only *ditch water*; bottles marked "Alsop's bitter ale," probably had nothing in them but air. Auctioneering became the most thriving business: to attract customers, one "knight of the hammer" had a man playing, during the forenoon, popular tunes on the key-bugle; a rival establishment opposite collected its customers together by the dulcet strains of a bagpipe. On all sides, at mid-day, the only sounds heard were "*going—going—gone.*"

In consequence of the high price of building-materials, and the excessive house-rent demanded, tenements of wood and iron were imported ready-made. The same plan was adopted for public structures: thus, to meet the wants of the Episcopalians, an iron church was sent from England to the order of the bishop of Melbourne; it was capable of holding 700 persons, being seventy feet long by fifty broad, with a nave, side-aisles, and two galleries at each end of the building. The outside was formed of corrugated and galvanized iron, and the interior lined with thick planking, covered with paper; between the two a space of three inches admitted ventilation; the roof was iron, and the ceiling made of inodorous felt, papered; felt, as a non-conductor, insured coolness: a square tower, forty feet in height, was fitted with belfry and clock; a pulpit, reading-desk, altar, baptismal font,

* Westgarth's *Victoria*, p. 79.

seats, and fittings, together with a vestry, were most complete; and the whole cost no more than £1,000. An iron parsonage, subsequently added, comprising parlour, four bedrooms, kitchen, servants' room, pantry, and store-room, cost 250 guineas. A considerable trade has now arisen in London, Bristol, Glasgow, and other places, by the manufacture of habitations and warehouses for export to the Australian colonies.

The class who profited most largely by the gold discoveries was the shopocracy of Melbourne, who were chiefly Irish; their profits on the retail of their respective commodities could scarcely be calculated; indeed, their consciences were frequently the only limit to the prices demanded, and readily paid. In addition to their counter business, most of them had speculated in suburban lots, for which £30 to £50 per acre had been given: those lots became worth £500 to £1,000 each in eligible situations. Some employed spare capital in running up wooden houses for the new-comers. For instance, at St. Kilda, a suburb of the city, 100 of these tenements were constructed in two or three weeks, and let before they were finished. And here it may be remarked, that Victoria has had its agricultural as well as town population largely augmented from Ireland; but in Australia, as in Canada and the United States, the Celt has demonstrated, that where there is a fair remuneration for labour, a removal from the temptation to crime, and an opportunity for the exercise of skill, he is at least equal in physical, moral, and mental characteristics to any of the most favoured races of mankind.

The extraordinary state of things which had arisen within little more than a year, in a colony not a sixth of a century old, materially affected society in all its aspects; the older colonists, although they became rapidly enriched, disliked the new-comers—most of whom were poor, many rude and ignorant, and some, not a few, vicious: the office-holders and annuitants, whose incomes were fixed, looked upon the gold discoveries (at least, till their salaries were raised 50 to 100 per cent.) as something akin to a curse: one writer, Sir W. A'Beckett, chief-justice of Victoria, wrote a pamphlet under the signature of *Colonus*, in which he pretty plainly indicated his view that Pandora's box, with all its evil genii, had been opened at the gold-fields; he evidently did not even admit that Hope had been retained in the

casket;* in fact, it was pretty plainly declared that Satan had been permitted to set up a vast golden image at the Antipodes, and had ordered all men to fall down and worship the same.

That the sacrifice to mammon was general, and manifest, both publicly and privately, in official, as well as in non-official persons in Australia, was undoubtedly true: but where is it not so? Look at the Exchanges of London, Liverpool, Glasgow—the Bourse of Paris—the Marts at New York, Hamburg, &c., and it will be seen that mammon is everywhere in the ascendant. Let any economist pursue his investigations beneath the surface of society in England, and he will find that a large part of the middle, and some even of the wealthier classes, are living *beyond* their means; that few are expending only their incomes, and fewer still are laying by an annual surplus. To be content with the station of life in which it has pleased the Benign Disposer of man's earthly career to place him, may be the catechism of infancy; but it is not evidently the creed of manhood. Most persons are striving to attain a position beyond their existing social status; many are endeavouring to appear richer than their neighbours—to vie with them in entertainments, in equipage, and in dress—aye, even in the funeral pomp which is conveying a mouldering corse to mingle with the earth from which it was formed.

Such is the lament in England of the Christian—such is the anxious thought of the far-seeing statesman. I believe that this idea was strongly impressed on the mind of the late Sir Robert Peel, whose pulse throbbed strongly for the prosperity and perpetuity of his country. This eminent man declared, that from an examination of various official and statistical documents, he felt assured the mass of the comfortable classes in England were living beyond their incomes; he saw, from the extensively-mortgaged condition of territorial property, that the landed aristocracy of England must share the fate of that of Ireland, unless a check were interposed to their extravagance and inevitably downward progress; he could scarcely avoid noticing that dress, among his fair countrywomen,

* One of the nuisances which Sir W. A'Beckett lays at the door of the gold-finders is the unsewered and neglected state of Melbourne; but this existed before the gold discoveries; and if he will read the reports of sanitary officers in October and November, 1853, on the disgraceful—aye, even barbarous

(who need less meretricious adornment than any other race), was become an absorbing, expensive, destructive habit; and that gambling in railways, mines, and other speculations, with the desire to get money for the gratification of these and various passions and appetites, was become an idol-worship throughout the land. That there are numerous exceptions to the rule only proves its existence; and nothing but the pervading and renovating *spirit* of Christianity (not the enactment of lifeless forms) can cure a growing and alarming individual and national evil. Before we censure the Australians for the *auri sacra fanus* manifested at Melbourne and Sydney, let us look at home, and pluck the beams out of our own eyes. Many colonists are now returning to England with fortunes of one and even two hundred thousand pounds each, acquired in a very short time; some by devoting every faculty to the production of wool and the breeding of stock as graziers; others by jobbing in land, trafficking in gold-dust, or speculating with merchandize; not a few from grog-selling: they will be received and courted here without inquiry as to the mode in which their wealth was obtained, and with little or no investigation as to their mental or religious developments; but the modest man of science, the missionary of the cross, the geographer, political economist, and philanthropist, who return from the Antipodes with minds stored with knowledge—hearts yearning for the extension of Christian civilization—souls sympathizing with human suffering in every clime—thoughts deeply intent on the preservation of the lives of the aboriginal races whose territories the Anglo-Saxon and Celt have ruthlessly occupied—these pioneers of the gospel and its practical workings are received only into a few small coteries devoted to their respective views—and being without wealth, they remain comparatively unknown and unheard-of in the middle ranks of English life. To say that such a state of society can last long in England or in Australia would be irreconcilable with a belief in the extension of vital spiritual growth now in operation, as I believe, though slowly, throughout the British empire—and nowhere more than in state of Newcastle-on-Tyne, Glasgow, and other towns in Britain, as disclosed while cholera raged there, respecting sewage and cleanliness, he need not attribute to the gold at Mount Alexander, neglect of the drainage at Melbourne and Geelong, which has been complained of for several years.

the aristocracy of Britain: let us, therefore, while we deplore the existence of a pernicious malady at the extremities of our widespread domain, be the more careful to destroy its growth at the centre of dominion, and, with the aid of that Divine power, by which alone man can be regenerated and purified, finally extirpate the root whence the branches are nourished.

The auriferous discoveries of 1851-2, undoubtedly "*precipitated Australia into a nation.*" This expression the gold-opponents cavil at, and assert that it would have been better that the country had been "elevated," rather than "precipitated." But the words thus used by Mr. Wentworth, a distinguished colonial lawyer, bore a similar signification, with an additional meaning, that the elevation had been precipitated or hastened more rapidly than would have been the case by the ordinary course of events. It is certainly as dangerous to morals for a community to become suddenly enriched or powerful, as it is for an individual; the proverb which declares, that if a beggar be set on horseback he will ride into the pit of Tophet, is also true in reference to a nation. But there is an antidote against the dangers attendant on the sudden acquisition of wealth: the word of sacred writ enjoins—"if riches increase, set not your heart upon them;" and the righteous nation, or the sincere Christian, on finding themselves unexpectedly improved in their worldly circumstances, will the more carefully take heed unto their ways—will remember that power and money are means of raising the weak and benefitting the poverty-stricken, conferred by the Giver of all good for those purposes; and that a responsibility is thus conferred, for which a strict account will be demanded by Him, who, sooner or later, will mete unto each man, and to every nation, according to their works.

An examination of numerous official and public documents, as well as private communications, convince me that the Australians are providing religious ordinances, and moral and intellectual instruction, to carry their respective provinces through the dan-

* In June, 1853, there were 999 *foot*, and 599 *horse* police; besides 50 soldiers employed as mounted troopers for gold escort.

† The penalty for unlicensed grog-selling was £50; to avoid detection, the contrabandists had "plants" of spirits hid in the bush, which, it was alleged, the police were generally aware of. The vendors only brought into camp small quantities at a time, and were allowed to prosecute this illegal calling until

gerous ordeal to which society is now subjected. To aid them in this righteous cause, by cheering encouragement, should be the object of leaders and enlighteners of public opinion at home and abroad. But this will not be promoted by considering gold as an unalloyed evil, and treating those who are obtaining it from the bowels of the earth as a degraded class of our fellow-subjects.

Unfortunately, this feeling towards the diggers began to prevail after the first burst of excitement was over, in 1852: their useful occupation was officially considered by some merely as a means for gathering money into the government treasury.

The licensing system was pushed to an extreme; store-keepers, schoolmasters, doctors, parsons, and lawyers, were obliged to take out licenses,—even a carter, looking for his bullocks in the bush, was fined £5 for being without a 30s. permit. The commissioners' staff and police, in white and blue uniforms, bedizened with lace, booted and spurred, and mounted *a la militaire*, looked on the miners with contempt—treated them with great harshness, and, in several instances, very brutally. Mr. Westgarth informs me that he has seen the diggers losing their precious time at the commissioners' tent, waiting for their licenses, the officials being too lazy to perform the easy work of delivering the monthly tickets. In one noted case the police* pulled down several tents and huts in the night, on the suspicion of grog being within them,† and the inmates, men and women, were turned into the open air. On this occasion, compensation was promised to the parties whose property was wantonly and unlawfully destroyed; but the offenders were continued at the stations where their conduct was condemned.

It is not surprising that the miners, finding no improvements in the roads, and no protection from the police, lost all confidence in the executive: the more so, when they found that Governor Latrobe was endeavouring to double the license-fee.‡ Added to this, a motion in the Legislative Council of want of confidence in his administration was rejected only by a majority of two votes.

(in Chinese phrase) they were *ripe* for squeezing, when the informing policeman obtained half the fine. The publican could well afford the £50 out of his enormous profits; and he soon went to work again at the hidden stores. Imprisonment ought to have been the punishment, instead of penalties, which became incentives to collusion with the police.

‡ An export tax on gold was also contemplated.

No attention being paid to entreaties and complaints, "indignation-meetings" were held at the large gold-fields, commencing with Bendigo, where several thousand men, "armed to the teeth," passed a series of resolutions, which were embodied in a petition to the lieutenant-governor: the substance of their case was, that they were too poor to pay the license-fee of 30s. per month; that in consequence of the few officials appointed to issue licenses, the diggers, store-keepers, and other residents, must sacrifice much valuable time at every monthly issue; that the tax bore unjustly upon invalids who cannot work, and hard on "new chums," who were ignorant of the required skill for gold-digging; that the land monopoly prevented successful diggers from investing their hard earnings in land; that the persons authorized to collect the license-fee went about armed; that many of them were disreputable characters; and that they insulted and cruelly ill-treated all who neglected taking out a license. After a detailed statement of their grievances, the diggers proposed a license-fee of 10s. per month, a reduction of the penalty to be paid by those who neglected taking out a license, and a reasonable time to be allowed to new-comers before they came under the operation of the tax.

Similar meetings were held at M'Ivor, Castlemain, and other places; the Bendigo petition was adopted, and strong speeches were received with enthusiasm. The miners asserted that the money raised from them was employed in paying a host of useless officials, instead of improving the means of transit, and that they had no voice in the imposition of an oppressive tax.

Delegates were appointed to wait on the governor at Melbourne, and represent their grievances. They were told by Mr. Latrobe that he was unable, on his own responsibility, to comply with their request, and was prepared to enforce the law; that the license-fee was a mere payment for a certain extent of public property, alienated for the benefit of the miners; and it was added that the fees were employed for their benefit, and in securing them good government. In reply to this argument it was observed, that the diggers paid quite as much in the way of taxation as any other denomination of colonists, and were entitled to the same police protection and advantages accorded to other classes of society.

It was further observed, that half a million

sterling per annum, received in the shape of licenses, ought to have given them roads to the gold-fields, instead of the route being almost impassable for half the year, whereby the diggers were obliged to pay for the necessaries of life double and sometimes treble the sums they could have procured the like articles for in Melbourne.

The miners expressed their intention not to submit to so exorbitant a special tax, resolved on passive resistance, and tendered 10s. a-month, which was refused by the commissioner, who declared them rebels; thereupon troops, with two light guns, were dispatched, towards the end of August, to the gold-fields; happily, however, a better sense of humanity and justice ultimately pervaded the intentions of the local government; but there was a vacillation which gave the miners (who were too strong to be coerced) a great advantage in their discussions.

To the surprise of the whole community, at the opening of the Legislative Council, on 30th August, Mr. Latrobe declared it was the intention of the government to abolish the gold license-fee altogether at the expiration of three months—the sum of 40s. to be paid for August, September, and October, and a mere nominal fee was to be imposed for the purpose of registration. Subsequently, a select committee of the Legislative Council was appointed to consider the whole matter. Local writers described the conduct of the authorities as exceedingly mischievous, and asserted, that they were in fact, "training a young colony, step by step, to get nothing for the sake of justice alone, but everything when a hint of force made it expedient." And of the governor it was remarked—"He is always ready to raise expectations, and feeble to realise them; never deficient in plausibility; promising to give every remonstrance his '*best consideration*,' but at the same time never again moving in the matter till *forced to it*; and then difficulties, real or imaginary, appear so to multiply at every step, that a measure which might be eminently useful, if properly carried into effect, is allowed to drag along its slothful length until contempt changes place with loyalty and respect."*

Mr. Latrobe had by this time retained the administration of affairs for nearly double the period officially allotted to colonial governors; his resignation of the office was therefore accepted, and Sir Charles

* On the 12th September, 1853, the governor admitted the justness of the miners' complaints.

Hotham (a naval officer, who distinguished himself diplomatically in South America, respecting the navigation of the Plate River, and during the disturbances between Buenos Ayres and Monte Video) was selected to fill the arduous post of chief over a mixed, unsettled, and excited population—a duty which will require the exercise of patience, justice, firmness, and above all, of Christian charity, for its satisfactory fulfilment.

With all the admitted faults of the motley population congregated together from different places, there was an English love of justice and common sense predominating among the mass, and none of the scenes which so frequently disgraced the gold-hunting population at California were observable. A *Vigilance Committee* was once talked of, not for the execution of "Lynch law," but to seize and hand over offenders to the government to be dealt with according to their merits: for instance, a digger at Bendigo quarrelled with his mate and stabbed him thrice in the waist and belly; the bystanders seized the murderer, bound him to a tree, and on the following morning delivered the criminal into the custody of the police.

It is to be regretted, therefore, that the excellent spirit which was manifested by the mining population in 1852 was not preserved in 1853, by attending to their reasonable complaints, and thus preserving their support of law and order. The existence of an inefficient government at Victoria in 1852-3, has inflicted a serious injury on other colonies, led thousands to consider law as the antagonist of justice, and compelled them to feel that the latter was only procurable by the subversion of the former. Moreover, in the contest between the people and the local authorities in Australia, the rightful prerogative and dignity of the sovereign was unfairly dragged into the arena to aid petty functionaries in their assertion that all minerals and waste lands belonged to the crown, who might retain, grant, or sell them at its pleasure; to this it was replied, that the monarch had no personal interest in the waste lands or in the gold which they contained; that the crown, through its ministers, was simply a trustee for the public,

* There was a teetotal society; but the view of the new association was to check the evil by the withdrawal of men from the temptations of the tavern by the substitution of other attractive places of resort, where either business can be transacted, or social intercourse enjoyed, or the excitement and pleasure of the most interesting kinds of reading

who had a right to demand the alienation of the land and all its products on equitable terms; and, that although a discretionary power existed, there could be no final resistance, otherwise the public would be wronged under cover of a trusteeship created for its benefit. Should the crown prevent the beneficial occupation of land and the digging of minerals, which it was unable to accomplish of itself, or only authorize the public to do so on condition of fulfilling some unreasonable requirement, then the *vis Popularis* would be brought into collision with the *vis Regia*, and general and immediate interests would be found stronger than individual claims or obsolete prescription.

While the government was disputing with the miners as to the rate of taxation, and grasping at an unnecessary amount of revenue, the golden age of profits to bullion dealers and mercantile traders was fast passing away; as regards the former, gold which at first was only 55s. to 60s., now rose to 76s. and 77s. 6d. per oz.; and the latter experienced, owing to enormous imports, a fall in commodities of 50 to 100 per cent.: flour, for instance, was at so low a figure that some thousand barrels were shipped for England, and manufactures were forced on neighbouring markets below cost price. The price given by merchants for "dust" as a remittance, was 77s. per oz.; freight to England, deliverable at the bullion-office (*Bank of England*), 4½d. per oz.; insurance to Great Britain, three guineas per cent. Advances were made to individuals by the Australian banks on gold shipped to the United Kingdom at 60s. per oz.

A commercial crisis was evidently at hand; but there was an abundance of unemployed capital, which caused a combination in the form of joint-stock companies for local improvements; such as the *Melbourne, St. Kilda, and Brighton Railway* (capital, £250,000, in £20 shares); *Melbourne and Geelong Railway* (capital, £350,000); *Melbourne, Mount Alexander, and Murray River Company* (capital, £1,000,000); a *Bath and Washhouse Company* (capital, £60,000); an *Immigrants' Aid Society*; and *Church of England Association for promoting Temperance*.*

obtained. To carry out this object, a large amount of money was to be expended in the erection of a suitable building, where coffee-rooms and reading-rooms, with lecture-hall, &c., would be provided on a commodious and handsome scale, but at a trifling cost, to any one disposed to avail himself of them.

An idea began to prevail that the gold-fields were being exhausted, that nearly all the surface-metal procurable had been obtained, and some metallurgists were of opinion that gold was not generally found at great depths. A comparison of the escort returns of 1853 with those of 1852, did not indicate an aggregate diminution of yield:—

Months.	Gold received per Escort.		Gold Shipped.	
	1852.	1853.	1852.	1853.
January . .	53,594	186,615	160,477	266,668
February . .	56,142	172,239	152,560	189,675
March . . .	62,026	169,654	107,406	166,423
April . . .	68,041	170,427	92,512	101,683
May	77,247	116,812	94,975	213,319
June	116,009	122,695	152,242	253,865
July	320,218	198,007	179,412	202,126
August . . .	314,195	168,419	172,091	147,621
September . .	307,282		161,189	
October . . .	277,574		248,397	
November . .	281,118		322,550	
December . .	149,581		131,163	
Total oz.	2,083,027		1,974,974	

The districts of Mount Alexander, Bendigo, and Ballarat were the principal fields for the greater part of 1852; the following is a comparison of their yield with 1853, so far as the escort returns indicate:—

Months.	For 1852.	For 1853.
January	53,608	156,856
February	55,889	142,644
March	61,389	133,655
April	67,556	138,277
May	69,453	124,302
June	108,650	106,146
July	320,218	165,779
August	314,195	
September	307,282	
October	277,574	
November	275,335	
December	140,561	
Total oz. . . .	2,051,710	

The relative yield of the different gold-fields is shown by the number of ounces brought down by escort, in four successive trips, during the winter period:—

From	26th Aug.	3rd Sep.	10th Sep.	17th Sep.
Mount Alexander	39,912	43,384	44,226	21,738
Ballarat	5,946	8,377	15,258	13,615
Ovens	5,746	5,995	—	5,358
M'Ivor, &c. . . .	4,433	3,186	3,571	2,069
Goulburn	—	—	1,970	436
Total oz. . . .	56,037	60,942	65,025	48,574

Showing a total, for one month, of 230,578 oz.

independent of the Adelaide and Sydney escorts, which took considerable quantities to their respective colonies. Assuming the product for the month 260,000 oz., at 77s. per oz., it was upwards of £1,000,000 sterling. The shipments from the 1st of January to the middle of October, 1853, were about 2,000,000 oz., valued at upwards of £7,000,000 sterling.

Rich *placers* were said to be discovered in several localities, viz., at *Whipstick Scrub*, and also at *Sydney Flat*, eight miles north-west of Bendigo; the latter divided attention with *Sandy Creek*, beyond the Loddon, thirty miles from Bendigo, in the direction of Mount Korong, where the "surfacing" surpassed in richness all other known fields. The gold was large, chiefly in the form of nuggets, and extraordinary successes were mentioned; the discovering party obtained, it is said, 130 lbs. of gold in seven hours. At Bendigo the miners commenced trying the second bottom, or pipe-clay stratum, with success. But the fears about an exhaustion of the gold were materially dissipated by the find, in September and October, at two Ballarat gullies, named *Canadian* (from its discovery by a North American colonist) and *Prince Regent*. Here deep sinkings—30, 50, 80, 100, and even 120 feet were made—requiring a mass of slate and unproductive soil to be removed before the washing-stuff was reached—a labour of one, two, or three months. Deep holes required to be slabbed from top to bottom (one of the party being necessarily somewhat of a carpenter), and to have in the bed of the gully a raised barricade of four feet high, well clayed, to prevent surface-water running into it, which, in the rainy season, was very likely, whereby some good holes were so suddenly filled at the beginning of winter, that tools and everything had to be left, the miners barely escaping with their lives. To prevent the accumulation of water, strong parties of seven or eight divided themselves into three gangs, working each eight hours day and night; where the party was only four or five, twelve continuous hours' labour, in two relays, were cheerfully undertaken. The usual mode of proceeding was to sink a shaft of from six to twelve feet in diameter, to a depth varying from 20 to 100 feet; at the base radiating tunnels were made, which were connected at the outer ends by a circular tunnel; all the produce was sent up the shaft. Holes of three-feet-by-two cost

for sinking, according to depth, from £200 to £500, reckoning the value of each man's labour at the rate which it is usually hired for at Ballarat, at 20s. a-day; even counting nothing for labour, the actual outlay for provisions, timber, and tools, was about £100; and with this outlay many pits were sunk on mere speculation, the diggers saying—"we know it is uncertain; but if we do hit, we hit it heavy." The yield of some of these holes, especially in Prince Regent's Gully, was so great, that twelve of them were termed the "jewellers' shops:" it is said that from one of these, 12,000 oz. = £40,000 was obtained; and that the auriferous soil was worth from £80 to £100 per square foot. Three men, in six days, raised 192 lbs. weight of gold. A man named Wilson, who had been a servant at a tavern, obtained, it is said, one hundred weight avoirdupois from a ten-gallon keg of the washing-stuff out of a hole in Prince Regent's Gully. Several parties, after a month's work, acquired from 200 to 400 oz. of gold each. The metal was generally found in the beds of subterranean creeks; some diggers called them *basins*, others *gutters*; the bed or bottom was generally six to eight feet wide at top, and two to four at bottom; but the gutter was soon lost sight of, and baffled skill and ingenuity for its rediscovery, although fifty holes were dug in different directions. Canadian and Prince Regent's gullies are about a furlong apart, and run nearly in the same direction, distant from the Eureka diggings about three miles; the whole of these auriferous tracts are in progress of connection by a chain of claims. The line of gold from each of the above gullies has been found to cross the main Buninyong gully in the direction of the Gravel-pits and Eureka, and the richness of the district or otherwise will be fully tested. [I hope to give, in an *Appendix*, the latest accounts from this and other gold-fields in Australia.]

The arrival in England of ship after ship, with large quantities of gold, caused an

immense export of goods to Australia. The British merchants are always at first very chary of entering on doubtful or hitherto unexplored fields of enterprise; but when they see some more adventurous neighbour realising high profits from foresight and fair speculation, they rush recklessly into the trade, and soon overdo the market. This was strongly exemplified at the period of the independence and opening of South America, when all sorts of commodities were sent thither without reference to individual tastes or climatorial necessities: for instance, quantities of warming-pans to regions of perpetual summer—the people, not knowing their use, converted them into culinary utensils; skates also were exported to places where ice had never been seen: so also when the monopoly of the East India trade was abolished, in 1813-14, sapient calculators thought a hundred million persons would require an immense supply of hats (forgetting or not knowing that turbans were used), and hastened to forestall other exporters, by despatching as many coverings to Calcutta as would meet the demands of all the hat-wearing population of India for fifty years to come. When the Chinese trade was opened, in 1833-4, there was a rush into the Canton markets which precluded profit for several years. Owing to similar reckless speculation, I have frequently purchased European goods in Asia, in Africa, and other parts of the world, at lower prices than they could be made at the seat of production.

The same holding back in the early stage, and subsequent inconsiderate haste, was manifested in the Australian trade. No less than thirty ships arrived at Melbourne, filled with cargoes, within the space of three days, in the month of June.*

In July, there were in the port, 8 steam-vessels, 73 ships, 89 barques, 58 brigs, and 58 schooners, whose aggregate burthen was estimated at 84,000 tons. From 12 to 14 vessels arrived daily, from various parts, laden with goods. It was calculated that

* The rapidity with which voyages are made in the present day, lessens the number of ships employed; the extent of the Southern Pacific trade will, therefore, be the more evident. The *Argo*, which left England 11th May, 1853, for Australia, returned home after an absence of only five months and two weeks; her passages, out and back, were made in exactly the same time, viz., sixty-four days. She brought to England gold to the value of £537,776, 100 passengers, and a full freight. The *Victoria* steamer left Gravesend 19th June, 1853, and ar-

rived at the nearest Australian port (Adelaide) on the 18th August—an unprecedented short transit, and contrasting strongly with the period when five or six months were occupied with the voyage. The necessity for rapid voyages to our distant southern colonies has caused the construction of a class of ships very superior to those formerly employed in the mercantile service. Some of the best and swiftest vessels now engaged in the Australian trade were built in the British colony of New Brunswick, North America.

the weekly tonnage entering inwards, amounted to 2,000. For the six months ending 20th of August, no less than 968 vessels—burthen, 265,000 tons—entered inwards. Three weeks in August show these numbers:—

Vessels, Tonnage, &c.	Week ending		
	4th Aug.	11th Aug.	17th Aug.
Vessels inward, No. . .	51	24	58
Aggregate tonnage . .	20,415	9,152	21,605
Passengers, No. . .	1,976	1,646	3,015

During these three weeks about 3,000 tons of flour, and a large quantity of biscuits, ship-bread, &c., had been received. The value of imports for the quarter ending 5th of July was £4,115,233; for the previous quarter, ending 5th of April, £1,488,290: total for half year, £5,603,523.*

The quantity of spirits and wine imported and bonded during the July quarter was—spirits, 537,460; wine, 56,312, gallons: there were also 32,840 casks of beer and cider; the value of which latter alone was £150,115. The casks, averaged at twenty gallons each = 656,800: there appears to have been imported in three months, for a population of about 230,000 (including men, women, and children), 1,250,572 gallons of intoxicating liquors, or, for each mouth—infant and adult—about *six gallons!* It is not surprising that a great fall in prices took place in Melbourne. Other articles, equally in excess of the demand, were poured into the colony.

The provision-market was excessively overstocked. There were in port 50,000 barrels of flour,† which was quoted at £32 per ton on 11th of June, and offered 2nd of July at £6 10s. per ton, barely more than the freight from England or America; while the cost for carrying and landing it, a distance equal to that between Westminster-bridge and the West India docks, was 40s. per ton: the landing of a barrel of flour, and its storage for a month, would be equivalent to its value in the market.

A Melbourne price-current of 18th July, 1853, gives the following statement of the flour-trade for the year ending the 30th of June last; and a comparison of the quan-

* Six days only of week.

† The supply required for 60,000 mining population was 10 lbs. each per week = 600,000 lbs. = 300 tons: or for the year, 15,600 tons. The cost for conveyance from Melbourne was £40 per ton, at which rate, for the whole year, the carriage was £624,000.

ties imported for the year ending the 30th of June, 1852:—

From	1852.		1853.		Year ending 30th June, 1853.	Year ending 30th June, 1852.
	3rd Qr.	4th Qr.	1st Qr.	2nd Qr.		
Europe	Tons. 9	Tons. 234	Tons. 586	Tons. 1,601	Tons. 2,430	Tons. 207
United States . .	35	459	2,303	6,239	9,036	8
British America .	—	5	—	12	17	—
East Indies . . .	—	—	70	215	285	10
Neighbouring } Australian col. }	1,671	6,105	1,265	2,284	11,325	14,855
Total Tons . . .	1,715	6,950	4,887	10,835	24,337	15,080

“From this table it will be perceived that America has sent us no less than 9,036 tons during the last twelve months, against only eight tons in the preceding year; while the imports from the neighbouring colonies have actually decreased in this article to the extent of upwards of 3,000 tons. This is rather a striking commentary upon the effects of gold as respects the cultivation of the important article of food; and the fact will appear still more striking when we mention, that in 1851 there were under cultivation in this colony no less than 29,633 acres of wheat, yielding about 740 tons of flour, which had decreased last year (1852) to 16,823 acres under cultivation, yielding only about 420 tons of flour. Here we have a decrease in the supply from the neighbouring colonies of 3,000, and a decrease on our own yield of 320 tons; to compensate for which we have the enormous imports from America and other ports, to which we have already alluded. The quantity of these foreign supplies has certainly been great of late, but they have been partly removed by shipments of inferior qualities to England, and of other and larger quantities to Sydney, and other colonial ports. No less than from 20,000 to 30,000 barrels has found an outlet in this manner during the last two months; and, in consequence, the market has been much relieved. At present, though it is very difficult to form an estimate, it is pretty generally believed that the quantity of all kinds on hand exceeds considerably 100,000 barrels.”

Colonial flour was then £30 per ton; and American, 60s. per barrel: oats, 14s. a bushel.

The Americans rushed into the Australian trade with their wonted eagerness. There arrived at Victoria within one year, from the United States, 307 vessels, of which 87 were from California.

The prices of apparel were reduced from 50 to 100 per cent. less than the previous rates; and other articles in proportion.

The excess of imports at Melbourne benefited some of the neighbouring colonies at the expense of the British consigner. For instance: the timber, flax, potatoes, and provisions of New Zealand were in great demand at Victoria, and the coasting vessels (many of them owned, manned, and

commanded by Maories—aborigines of New Zealand)—returned freighted with cheap merchandize.

The following is a statement of the quantities and values of the principal articles of import into Victoria for only one quarter of a-year, ending 5th of July, 1853:—

Articles.	Quantity.	Value.
		£
Apparel and slops . . .	5,088 pkgs.	116,236
Arms	360 ditto	12,747
Barley and maize . . .	84,831 bshls.	51,036
Bags and sacks	1,415 pkgs.	5,308
Beer and cider	32,840 casks	159,115
Blankets and woollens	2,892 pkgs.	119,958
Butter and cheese . . .	904 tons	87,479
Bricks	1,285,806 No.	15,306
Candles	363 tons	28,066
Carts and carriages . .	734 No.	21,110
Coal and fuel	9,899 tons	38,988
Coffee	600,660 lbs.	19,908
Cottons	6,030 pkgs.	163,823
Cutlery and hardware	10,761 ditto	130,856
Earthenware	840 ditto	11,987
Fish, preserved	11,928 ditto	25,430
Flour and bread	11,710 tons	271,431
Furniture	8,440 pkgs.	70,076
Glass ware	4,021 ditto	14,978
Haberdashery and hosiery	3,480 ditto	119,241
Iron and steel	614 tons	10,876
Oats	177,577 bshls.	117,252
Oilmen's stores	20,895 pkgs.	61,201
Salted provisions	1,005 tons	66,703
Ship chandlery	253 pkgs.	3,037
Specie	171 boxes	797,490
Spirits	335,928 galls.	233,587
Sugar	1,876 tons	54,270
Tea	201,152 lbs.	14,062
Tobacco	1,122,062 ditto	52,803
Wine	214,860 galls.	96,819

The different countries with which this enormous trade for one quarter was carried on is thus shown:—

From	Imported in British ships.	Imported in Foreign ships.	Totals.
	£	£	£
Great Britain	1,909,162	270,832	2,179,994
Gothenberg	—	9,720	9,720
Bordeaux	—	21,848	21,848
Lisbon	36	—	36
Oporto	16,010	9,681	25,691
Cape of Good Hope . .	46,821	—	46,821
Mauritius	35,586	6,366	41,952
Van Diemen's Land . .	328,315	—	328,315
New South Wales . . .	397,989	—	397,989
Adelaide	150,123	3,500	153,623
Western Australia . . .	2,259	—	2,259
New Zealand	38,496	—	38,496
Bombay	13,657	—	13,657
Calcutta	126,335	—	126,335
Cochin	840	—	840

From	Imported in British ships	Imported in Foreign ships.	Totals.
	£	£	£
Colombo	660	—	660
Hong Kong	11,270	—	11,270
Singapore	65,534	—	65,534
Batavia	—	16,579	16,579
Manilla	1,980	7,300	9,280
Shanghai	6,491	—	6,491
Wampoa	1,404	—	1,404
Raiatea	1,150	—	1,150
Tahiti	2,199	—	2,199
Quebec	8,060	—	8,060
Baltimore	—	9,075	9,075
Boston	19,758	277,683	297,441
Salem	—	6,751	6,751
San Francisco	5,125	4,395	9,520
New York	—	233,854	233,854
Rio de Janeiro	—	1,060	1,000
Valparaiso	17,173	26,500	43,673
Geelong	820	—	820
Port Fairy	60	—	60
Portland	6	—	6
Totals	3,207,319	907,914	4,115,233

The activity of the Australian trade may be judged of from the circumstance that in one day, in September, the port of London had 131 ships—tons, 74,268—loading for our possessions in the southern hemisphere; of these ships 110 were British; 15 Dutch, 2 American, 2 Hamburg, 1 Bremen, and 1 French. In August, 96 vessels left London for the Australian colonies; in September, 118 were appointed to leave; of these, 49 were for Victoria, 35 for New South Wales, 15 for South Australia, 12 for Van Dieman's Land or Tasmania, 2 for Western Australia, and 5 for New Zealand. The value of goods on board these vessels must have been enormous.*

Liverpool, during September, sent 48 ships—tonnage, 30,507—to the same destination: 10 of these ships were each upwards of 1,000 tons; one, the *Sovereign of the Seas*, had on board 3,000 tons of measurement goods, valued at £300,000, and 65 passengers.† Glasgow and other ports also contributed their quota to the Australian trade.‡

The shipments of Manchester and manufactured goods from that district for the Australian colonies for the twelve months

* At this very period there were at Victoria, 423 vessels, viz., 70 ships, 5 steamers, 136 barques, 92 brigs, 112 schooners, and 8 hulks.

† Further particulars on the trade and shipping will be given in the next chapter and in *Appendix*.

‡ Liverpool sent to Australia during the first six months of 1853—ships, 138; tons, 73,190; during the remaining half year—ships, 134; tons, 82,501—ships, 272; tons, 155,691.

ending 16th of December, 1852, and 1853, were—

Articles.	1852.	1853.
Cotton yarn, lbs.	190,807	94,896
Cotton thread, lbs.	25,374	80,359
Cotton sundries, yds.	156,803	535,458
Calicoes, plain	5,446,548	17,932,070
Calicoes, printed and dyed	5,106,324	15,636,699
Cambrics and muslins	599,546	1,865,880
Cords, jeans, fustians, vel- vets, and velveteens }	67,119	146,139
Lace, gauze, net, & crapes	533,194	1,574,406
Unenumerated cotton gds. £	5,723	13,391
Linen and cotton goods } mixed, yds.	112,088	75,579
Linen, partly in value . £	69,810	128,687
Linen partly in length, yds.	777,269	2,469,774
Woollen and cotton goods, } value £	44,251	177,401
Woollen and worsted, val. £	141,352	544,466
Worsted and cotton, val. £	87,381	*371,202

It appears, therefore, that the export of textile fabrics in 1853, in excess of the quantities sent in 1852 (in itself a year of large export), was, of calicoes, plain, 12,000,000; ditto, printed and dyed, 10,500,000; lace, gauze, net, 1,000,000; linen, 1,500,000 yards. Woollen and cotton goods, value £132,000; woollen ditto, £300,000; woollen and worsted, £281,000.

It is estimated that the imports of Victoria, comprising food, manufactures, &c., during the year 1853, amounted in value to £12,000,000 sterling, which, for 200,000 inhabitants, would be at the rate of £60 each per annum.† Whether even the maintenance of the present yield of gold would enable the colonists to consume such a large extent of imports, is scarcely probable. Should the production of gold continue at the rate of twelve or fifteen million sterling per annum, population will be largely augmented, and manufactures must be in extensive demand. It is difficult, however, to predicate anything of the future, and my duty at present is to narrate facts. The record of transactions for the year may be closed with a comparative view of the rate of wages and prices of provisions in Melbourne since the discoveries in 1851.

* *Australian and New Zealand Gazette*, 7th January, 1854.

† In 1852, the population of the United States (about 25,000,000) consumed British goods to the value of £16,500,000, or at the rate of 13s. per head per annum.

‡ The weekly rations usually consist of 10 lbs. of flour; 10 lbs. of meat; 2 lbs. of sugar; $\frac{1}{2}$ lb. of tea, and a sufficiency of salt to each person weekly.

§ Gold was traced at *Tuena, Mulgannia, Copper-*

Prices at Melbourne in December.

Avocations, Provisions, &c.	1850.	1851.	1852.	1853.
LABOUR:—				
Labourers, per week	11s.	17s. 6d.	54s. 6d.	
Shepherds' with rations, } per annum †	23l.	29l.	38l.	
Blacksmiths, ditto	47l. 10s.	55l.	65l.	
General useful servants, do.	28s.	33l.	57l.	
Carpenters, per day	4s. 2d.	21s.	22s. 6d.	
FEMALE SERVANTS:—				
Thorough servants, per an.	15l.	17l.	27l.	
Cooks, ditto	18l.	20l.	42l.	
Nursemaids, ditto	9l.	17l.	23l.	
—				
Bread, 4 lb. loaf	7d.	—	1s. 6d.	
Sheep, wethers, each	6s. 6d.	—	15s.	
Cows ditto	2l. 5s.	—	4l. 17s.	
Geese and Turkeys, ditto	6s.	—	35s.	
Fowls and Ducks, per pair	4s.	—	24s.	
Cabbages, per dozen	1s. 6d.	—	27s.	
Rice, per ton of 2,000 lbs.	—	9l.	15l.	
Beer, Ale, per hogshead	4l. 10s.	5l. 10s.	6l. 15s.	
Tea, Hyson, per chest	2l. 9s.	3l. 10s.	3l. 15s.	
Coffee, Java, per lb.	5½d.	6d.	11d.	
Sugar, refined, per lb.	4½d.	7d.	9d.	
—				
Acre of land, near Mel- bourne or Geelong	25l.	—	1,000l.	
Cottage of 4 rooms (rent)	24l.	—	200l.	

The New South Wales proceedings in 1853, as regards gold digging, may be briefly recorded. The places worked were Sofala, Mudgee, Tamworth, Tambaroora, Avisford, Hanging Rock, Bingara, Rocky River, Goulburn, Murrurundi, Cameron's Creek, Braidwood, Bell, and Major creeks, and part of the Ovens district, within the colonial boundary; but the products (except from the latter) were small, § compared with the Victoria auriferous districts. Surface-washing was chiefly resorted to; water companies were established at several of the places; and "dirt," that formerly had to be carted up and down hill for several miles, was now washed on the spot by water conveyed in gutta-percha tubes. Bark, slab, and even log huts took the place of tents and lairs constructed of dry branches; the miners, who averaged from 9,000 to 10,000, were settling down at their several locations, and obtaining, at least, a competence. The southern placers, including the Ovens district, appear to have yielded the largest returns. It was estimated, in May, 1853, that, during the previous eighteen months,

hanian, and Mountain Run creeks; also at Hurwih, on Campbell's River and its tributaries, Gylmon-dyke and Davis creeks—at Winburnale Creek, a few miles north of Bathurst—at Billabong range, 100 miles from Bathurst—at Boro, in Argyle county, 24 miles from Goulburn—at Cunawang—at the Snowy Mountains—at Lake George—and at several other places. In fact, the whole region seems to be electrotyped with gold, which, it has even been asserted, may be obtained from the Sydney sand-stone.

about half a million sterling worth of gold had been obtained at the Braidwood diggings by about 700 diggers; the return to each man actively employed had, during this period, averaged from two to three ounces of gold per week of six days—say from £6 to £9 sterling, which must be considered “a fair day’s wage for a fair day’s work” of little more than mere manual toil.

The western and northern fields were several times nearly abandoned, but as often re-occupied; and although the “find” did not present such lottery prizes to the few, it was pretty equally distributed to all steady workers. At Bingera, in the district of Liverpool plains, the diggings were at one time very profitable; several nuggets, varying in size from 26 to 17 oz., and downwards, were found; parties of three averaged a receipt of 6 oz. per week; two men obtained, out of Bingera Creek, 22 oz. in nine hours, and, subsequently, not less than 3 oz. a-day. At a contiguous gully, near the *Black Forest*, 2 to 3 oz. a-day were procured from dry diggings. The washing-stuff at Bingera consisted of decomposed quartz and rotten trap, accompanied with small quartz veins, very soft, and a few iron-stones or boulders; colours—green, yellow, and Prussian-blue; the bed-rock—serpentine. At Samuel Flat, Tamboorara, the geological features were striking: above a slate ridge a bed of “pipe-clay” (schist) appearing, when first broken, similar to chalk; the upper surface like ploughed ground: the washing-stuff, or gravel, in which the gold was found, is twelve feet from the surface. At the crest of Bald Hill, the slate breaks through soft rock, rises about six feet, and to within five feet of the top of the pipe-clay. There is a small section of auriferous quartz on the top of the hill. The geological investigator and the mineralogist will find full details in the reports of Sir T. L. Mitchell, the Rev. W. B. Clarke, and Mr. Stuchbury, printed in the reports on the gold-fields, laid before parliament in 1852–3.

There are no complete returns of the gold obtained from month to month, during 1853,* in New South Wales; the superior

* Gold exported by sea from New South Wales, between 1st January and middle of September, 1853—oz. 1,473,148: of this a considerable part was derived from the Victoria mines. I hope to give, in the *Appendix*, the latest returns.

† For Banking returns, see *Appendix*.

‡ This enterprising gentleman is the son of a British officer, and was born in the Peninsula dur-

attractions of Victoria drew off many miners to that quarter, and the winter (June, July, and August) was the severest one known for at least thirty years; heavy and continued rains overflowed the rivers, and converted many roads into quagmires; a large tract of country round Goulburn was under water; on the Bathurst plains there was a fall of snow (an unusual sight) on the Blue Mountains—it lay two feet deep, and the cold on the higher elevations was intense; in some districts the frost not only killed the orange-trees, but blighted much forest-timber. At many fields the miners were obliged to suspend operations; but there was abundant employment for labour throughout the colony, and a high degree of prosperity: for instance, it appeared by the first quarterly returns of the monetary affairs of the colonists, that the deposits in the banks at Sydney (then containing from 70,000 to 80,000 inhabitants) amounted to £3,338,700, and their joint circulation of notes to only £974,700: this comparatively small sum, in proportion to the deposits, being ninety-two per cent. above the issue of notes in the preceding year.† Thus—

Notes and Deposits.	March, 1852.	March, 1853.	Increase.
	£	£	£
Notes of local banks } out }	512,600	984,700	472,100
Deposits in banks .	1,479,200	3,118,700	1,639,500

A remuneration, to the extent of £10,000 was awarded by the local legislature to Mr. Hargreaves,‡ for his practical demonstration of the *gold-placers*; and £1,000 to three men who had assisted him: £1,000 were also awarded to the Rev. W. B. Clarke, to be paid on the completion of his geological examination of the colony, in addition to the stipend of which he was in receipt, for his exploratory services.

The common sense which characterized the Sydney authorities, enabled them to perceive that it would be impossible to maintain a monthly license of 30s.; and that it would be advisable to encourage, rather than restrict, the efforts for the attainment of gold.

ing the Wellington campaigns. It is evident, from his simple narrative, that he returned from California to New South Wales under the strongest impression that he would find gold in his adopted country. He states that the first indication that convinced him of the Bathurst district being an auriferous region, was a schistose dyke running across the Summer Hill Creek at right angles.

The gold-digging license-fee on crown-lands was therefore reduced* from 30s. to 10s. a-month, for all classes, aliens as well as British subjects. "Clergymen, sick persons, officers on public service, and domestic servants resident at the gold-fields," were exempted from the license to which they were previously subjected. A royalty, in lieu of fees for leases, was fixed at three per cent. on the gross value of the gold procured, instead of ten per cent., as previously enacted. On private lands, the fees and royalties were settled at half the amount of those levied on crown property.

Public-houses were authorized to be licensed on the gold-fields. These concessions satisfied the mining population, and there was no resistance to the government authorities, as in Victoria.

Another judicious measure adopted, was the offering for sale small farms, varying in extent from 10 to 100 acres; this was so acceptable, that between the 9th and 31st of August, there were sold no less than 898 of these allotments, of which 430 were of thirty, 178 of forty, and 137 of fifty, acres each. Those who had acquired wealth were thus induced to invest it in the purchase of crown-lands.

A large augmentation of the general revenue was employed in useful public works, instead of being lavished, as in Victoria, on extravagant and useless hordes of officials. Among other satisfactory appropriations may be mentioned—£50,000 voted for the building of the Sydney university, at the rate of not more than £10,000, or less than £5,000, per annum. Railroads were encouraged, as were also other undertakings conducive to the welfare of the province.

During the search for gold, various portions of the territory (especially the southern parts) were explored, which had hitherto been neglected, and publicity was given to their leading features: among these may be mentioned *Blakeness Creek*, north of the *Yass River*, which was "prospected." The country around was found attractive. In the neighbourhood of Yass township there are several handsome private residences, with gardens, orchards, and extensive paddocks attached. The margin of the river is adorned with magnificent clustres of weeping-willows, whose pendent branches dip into

the clear stream: wild-ducks abound, and almost every description of indigenous birds. The climate is good; fruit is plentiful—apples and pears especially are of excellent quality; peaches and grapes, middling. The country is thinly-wooded, and covered with long yellow grass in March.

On leaving Yass, proceeding towards Gundagai, Mount Brown is conspicuous from the adjacent level ground. Further on, a mountainous tract is passed, where granite and schist rock abound, with a slight sprinkling of quartz. The road thence passes for a few miles through a plain, to the Jugyong Creek, half a-mile from which is the Murrumbidgee River, here thirty to forty yards broad, with, for the most part, a deep channel; a great extent of alluvial flats, and piles of drift in the trees on the river banks, indicate a rise of twenty or thirty feet in seasons of flood.

Passing along the bank for a mile or two, the road winds over mountains; granite masses again appear on the summit of ridges, and in the beds of the creeks: thence to Gundagai is tolerably level, with creeks and ascending hills; and, as the intended township is neared, quartz and slate appear in considerable quantity, and the region becomes decidedly auriferous.† Gundagai is in a valley between ridges and mountains, through which a large stream of water once poured, leaving an alluvial flat, varying in width according to the approaching or receding mountains.

It is probable that these and other districts around the Australian Alps are rich in minerals; and, as they contain all the elements necessary for the support and healthy existence of man, population will soon be attracted thither.

A few general remarks on the physical structure of the auriferous districts may not be inappropriate.

As the animal and vegetable kingdoms of Australia have puzzled naturalists, so its geological features have surprised men of science. The prevailing rocks are of an igneous character; many, however, so metamorphosed as to receive the appellation of *quartziferous schist*, which consists of chlorite slate, full of quartz veins, and dykes, and bosses of quartz: instances are numerous of slate with imbedded quartz, and quartz pervading slate. The Rev. W. B. Clarke seems to have had his geological creed confounded by what he saw:

* On and after October, 1853.

† Gold was found at *Adelough Creek*, near Gundagai, and on the *Black Range*, five miles from *Albury*, near the Victoria frontier.

he hints at the probability of quartz, greenstone, basalt, and slate, by the influence of segregation, chemical affinity, galvanic or other forces, being "derived from the same original source, and indefinitely varied in the order of their arrangements and relations to each other at different intervals."

While sinking mining shafts, the absence of ordinary stratification has been remarked, and the materials through which the diggers work were frequently alike on the tops of the hills and in the gullies. The irregularity of the mineral beds is very striking; no two holes are alike: the fantastic changes in the order and depths of the beds have been compared to the alternations of eight notes of music on different bars. In Victoria the slates are elongated, amorphous, crystalline, contorted, laminated, or without cleavage; the cleavage planes, evidently made by volcanic agency, sometimes, as at Bendigo, preserve a true parallelism while passing through contorted hard slate: in colour, they are red, brown, blue, white, and chocolate; some are very talcose and soapy; in others, grains or streaks, like rainbows, are seen.

At *Miles' Creek*, Bendigo, there are fine curvilinear lines in red slate. Near *Forest*, and beside *Fryer's* creeks, there is some blue "book-slate" resembling the leaves of a book; and, at the *Forest Creek*, mundic or iron pyrites crystals are found in dark, friable, unctuous slate. Odd changes of position occur. On the road from Bendigo to Bullock Creek, the slate in one place dips 80° to the east; a little further, 80° to the west. In *Ironbark Gully*, in a square yard of space, some blue roofing slate occupied the following positions—45° to N.E., 30° to E., 70° to N. The ridges of rocks generally run in nearly a north to south direction.

There is unceasing activity in the mineral as well as in the vegetable and animal kingdoms; the apparently inert mass of our globe is daily undergoing change; mountains are washed down by torrents into silt, and become the bed of the ocean; the hardest rocks are slowly crumbling into dust by the dissolving effects of the atmosphere; and the various earths are undergoing transformations of which we cannot foresee the result: thus, also, must it be with minerals. Crystals which have been termed the "*flowers of the earth*," are known to grow on the walls of mines previously bare; new separations and combinations are continually arising under the

influences of moisture and heat, and there are gradual developments and metamorphoses dependent on certain acids, alkalies, and other substances eliminated from air and water, by chemical processes, concerning which we are utterly ignorant.

How gold is produced—where it originates—is a mystery. Many of the miners are strongly impressed with the idea that it "grows," or comes up in yearly crops, in Australia. This idea has probably arisen from the observation that some deserted holes, on being tried again, have yielded large returns; one at *Forest Creek*, when driven a foot or two further than when neglected, was found to contain, almost in a heap, 20 lbs. weight of gold in nuggets. Another hole in the same locality, which the miner had abandoned at twenty-one feet deep without seeing a speck, was worked eighteen inches deeper by a fresh party, and a heap weighing 18 lbs. was obtained. Others affirm, that one or more volcanoes burst forth, and sent out showers of gold instead of cinders; and, in confirmation of their theory, they point to the shot-like appearance of nuggets, many of which have evidently undergone the action of fire.

A tendency towards the formation of crystals is everywhere observable; the granulated quartz or grindstone schist, has often minute transparent crystals in cavities; and in the soft sandstones of *Golden Gully*, Bendigo, exquisitely beautiful veins of crystallized quartz run in all directions. Australian quartz is of all kinds—black (caused by carbon); white, yellow, pink, or rose (by manganese); green (by copper or chlorine); red or brown (by oxide of iron); spotted, streaked, mosaic, porous, fibrous, clinker-like. The crystals are hexandron pyramids, single or double, of different sizes and degrees of transparency: some rise from the surface like wedges, and have a singular appearance; others have crystals attached to their sides; the prisms triangular, quadrilateral, or pentagonal.

Various *matrices* are assigned to gold, viz., quartz, mica, granite; or when the certain sedimentary and igneous rocks are observed in juxta-position. Generally speaking, it is found associated with iron, as in Australia,* California, the Ural (with iron pyrites); Siberia, Chili (with sulphuret of iron); Ceylon (in black peroxyde of iron);

* At Clunes, the fissures in the quartz are filled with a greasy red earth, highly impregnated with iron, in which gold was found.

Hungary (in pyrites); Granada (ferruginous clay-slate); Columbia (decomposed silicious rock adhering to a peculiar iron); the Niger (in ferruginous sands); and Wicklow (with iron of all kinds). When crystalline rock disintegrates, iron sand is developed and accumulated.

It is observable, that the production of gold chiefly takes place at no very great distance from the surface of the earth, though minute particles may be detected in the compact debris at a considerable depth. It has been supposed that the gold deposits in Victoria are not the product of washings from distant rocks, but owing to the decomposition of certain friable, metalliferous masses, which gradually unfold their treasures; that the precious metal is a sort of crystallization, or growth in crystalline formations, acting of course under regular but unknown laws; and that these masses are at this moment producing gold. It is certainly found in all possible situations—on the tops of mountains and in the depths of valleys: no person can confidently say where it does or does not exist. As the experienced miners observe—"we are never sure where to drop on it."

While in some places the metal is solely obtainable in nuggets, in others it is in the shape of an auriferous sand, combined with emery; and these, mixed with a yellowish powder, have been found in abundance on the top of a mountain range. It is most probable, that in the stupendous gullies, and amid the elevated portions of the primary formations, where gneis, granite, trap, quartz, schist, and iron abound—of which the Australian Alps, with their snow-capped summits, constitute the principal mass—gold will be found in very large quantities, in veins and masses, as originally cast up from the bowels of the earth, unaffected by surrounding chemical decompositions, or by the disintegration arising from the combined action of the elements. That Australia abounds in metals is beyond a doubt; the richest copper mine in the world is in South Australia, and copper-mines are now

being worked in New South Wales. A singular amalgamated ore has been found at Berima, seventy miles from Sydney, at the foot of Gibraltar ranges: it is composed of iron, gold, tin, nickel, rhodium, and titanium; procurable over a space of twelve acres, connected with three extinct volcanic mounds, and found continuous to a depth of thirty-five feet: the metals, when smelted, present an appearance of the best steel.*

At Quedong (Wellesley county), in the neighbourhood of the *M. Loghlin River*, and near the everflowing *Delegete River*, gold, iron, lead, and copper exist within a narrow compass, with abundance of excellent limestone, and plenty of wood on the adjoining ranges.†

Iron is very abundant; crystals of iron pyrites are common; carburet of iron (emery iron-sand) is associated with the gold: oxydulous masses of iron form a precipitate waterfall of sixty feet, near Oakey Creek (New South Wales). Ferruginous, or iron-bearing conglomerate, overhangs the Turon River at Ophir. Auriferous bands of argillaceous iron ore traverse the limestone of Bungonia. Large nodules of peroxyde of iron, and magnetic iron ore of all kinds, were taken out of the Victoria diggings. The "burnt stuff" of the miners is a ferruginous cement, binding quartz pebbles. In the Ballarat holes, it was found in some places ten feet thick; it was less at Mount Alexander, and generally less at Bendigo; but on the adjacent hills it is six to eight feet thick.‡

At five miles from Murrumbidgee the land is composed almost entirely of compact hæmatite iron ore, in pebbles from the size of sand to three or four inches in diameter; the ore is of a rich quality, and thousands of tons could be gathered from the surface; the metal extends along the road for nearly a mile, but its breadth was not ascertained.§ North of this iron ore are large masses of impure limestone, in which imperfect traces of corals may be observed. Mercury, in its native form, has, it is asserted, been seen in small quantities; the

five feet to the water-line—probably more. The upper bed would answer for calcining metallic ores or burning lime; the lower bed is highly inflammable, and would answer for most purposes, and may be easily obtained, the angle of the dip being scarcely perceptible from the horizon.—Sixth Report of *Geological Survey*, July, 1852.

† Correspondent in the *Melbourne Gold Diggers' Manual*.

§ Sixth Report by the *Geological Surveyor*, 1852.

* Singular metallic combinations will probably be found in Australia.

† In the neighbourhood of Barbigel, eighteen miles from the confluence of the Talbragar with the Macquarie, there are seams of coal visible on the river-banks: the sections show—(1) large rocks of coarse conglomerate, sloping back to the height of 200 feet; (2) fine-grained sandstone, twenty feet; (3) loose scaly culm-like coal, six feet; (4) hard fissile coal, resembling the splint coal of Lanarkshire,

same sort of decomposed clay-slate in which it has been found at High Torrington, North Devon, is also visible in New South Wales. Cinnabar, the ore of mercury, which generally accompanies gold and silver, will probably, ere long, be obtained. If quicksilver be abundant in Australia, the production of gold will rapidly augment. Platina and tin have been discovered in small quantities.

The geological structure of Australia, and the diffusion of gold and iron, indicate the existence of "precious stones." In September, 1851, Mr. Stuchbury, the government geologist, found or was shown various gems of small size, obtained in or near the gold district, viz., rubies (two varieties), sapphires (three varieties), garnets (two varieties), topaz (white), chrysoberyl, chrysolite, and cairngorm. He saw also "a small but beautifully-crystallized diamond from the Turon River."

The Rev. W. B. Clarke, in a report dated 14th February, 1853, says—"It is a most remarkable fact, that all over the tracts in which gold occurs amongst granite, such as the *Ovens*, the *Alps*, and *New England*, the gold is accompanied by a marvellous abundance of rubies, sapphires, and other gems, to the almost total exclusion of magnetic iron—vulgarly called emery—though true emery does occur; whilst in other localities of gold, magnetic iron is a principal indication of the metal." In the New England gold region, as in the Southern granitic districts, the proportion in which they occur in *Tilbuster Creek*, at a depth of about two feet below the surface, is—gold, one grain; rubies, 315 grains; sapphires, 49 grains; and oriental emerald, one grain. Another sample of four pans of "dirt" from the *Rocky River*, gave gold, 15½ grains; rubies, 118 grains; and other matter. So abundant are rubies and sapphires in the surface-drift of New England, and in the granitic tracts, that they may be procured anywhere and of all sizes, most of them water-worn, in about the same degree as the gold: some perfect unabraded crystals, with the usual octahedron form, were obtained by Mr. Clarke.

The diamond mines of Southern India present geological features very similar to the gold regions in New South Wales. The *Nalla Malla* (Blue Mountains, north of the river Kistna) have an elevation of two to three thousand five hundred feet above the sea; the outline is flat and rounded, very rarely peaked; they run north-east and south-west, the ranges gradually diminish-

ing in height, until, in the former direction, they unite with the sandstone and clay-slate mountains of the Godavery River, near Palunshah, which are considered, geologically, a prolongation of the Nalla Malla range. The breadth varies, but never exceeds fifty miles; only some parts can be crossed by travellers. The different rocks of which they are composed are mixed together without regard to order or position, each in its turn being uppermost; the term "schistose formation" was at first given by their investigator (H. W. Voysey, in 1824);* but subsequently finding that clay-slate was probably the most prevailing rock, he designated it "clay-slate formation:" this contained every variety of slaty limestone, between pure lime and pure slate; also of quartz, sandstone, sandstone breccia, flinty slate, hornstone slate, and of a substance which he called, for want of a better name, *Tuffaceous*, which had embedded in it rounded and angular masses of all the above-named rocks. The mountains are bounded on all sides by granite, which everywhere appears to pass under it, and to form its basis: some detached portions have only the upper third of their summits of sandstone and quartz, the basis or remaining two-thirds being of granite. Deep ravines are not infrequent. The diamond is found only in the sandstone breccia, which is found under a compact rock, composed of a beautiful mixture of red and yellow jasper, quartz, chalcedony, and hornstone, of various colours, cemented together by a quartz paste: it passes into a pudding-stone of rounded pebbles of quartz, hornstone, &c., cemented by an argillo-calcareous earth of a loose friable texture, in which the diamonds are most frequently found. The breccia is seen at depths varying from five to fifty feet, and is about two feet in thickness; immediately above it lies a stratum of pudding-stone, composed of quartz and hornstone pebbles, cemented by calcareous clay and grains of sand. The miners are of opinion that the diamond is always growing, and that the chips and small pieces rejected ultimately increase to large diamonds. This description of the geological structure of the country in the neighbourhood of the Golconda mines, is given with a view of drawing attention to the subject in Australia, where another Golconda may be found, rivalling that of Oriental fame.

* See Transactions of Asiatic Society of Bengal (*Asiatic Researches*), Vol. xv., p. 120.

Before closing this chapter, a few observations relative to the quantity of gold produced in different parts of the world may be useful. The statistics on gold, except those of recent date, must be viewed as merely approximative data.

From the earliest times, gold and silver have been considered as money, or the representative of value; they were probably coined, or at any rate assayed, at the period when Abraham "weighed" to Ephraim, for the cave Machpelah, "four hundred shekels of silver current with the merchant."* That the precious metals were abundant among the Egyptians, the Israelites, the Assyrians, the Canaanites, and other ancient nations, is manifest from the historical portions of the Bible, and from the relics still found in tombs and excavations. What amount of gold then existed we have no means of ascertaining. I saw in Egypt a series of coins, collected from pyramids, tombs, and ruins, all of great antiquity, but manifesting—as in other countries—that, as the kingdom decayed, the coinage was depreciated both in quantity and quality. Greece, at an early date, began to issue coins, and obtained gold from Persia and India. The Romans were celebrated for their coinage and medals: the quantity of gold and silver in the empire, between A.D. 14 and 806, is estimated to have been thus—

A.D.	£.	A.D.	£
14	358,000,000	446	96,692,332
50	322,200,000	482	87,033,099
86	287,980,000	518	78,229,700
122	259,182,000	554	70,406,730
158	233,263,800	590	63,364,057
194	209,937,420	626	57,027,652
230	181,943,678	662	51,324,887
266	163,749,311	698	46,192,399
302	174,374,380	734	41,573,160
338	132,636,942	770	37,415,840
374	119,373,248	806	33,674,256
410	107,435,924		

Europe, in the middle ages, was probably deficient in metals. India was a great gulf, which swallowed up for centuries the gold of other countries, which it received in exchange for merchandize, much coveted by other countries, as shown in my history of British India. Jacob supposes the quantity of gold and silver in circulation, in 1482, at 34,000,000; in 1660, at 130,000,000; in 1790, at 297,000,000: these estimates must necessarily rest on very imperfect data. The

* Genesis xxiii., v. 16.

value of a pound of gold was, in 1344, £15; in 1412, £16 13s.; in 1464, £20 16s. 8d.; in 1526, £27; in 1549, £34; in 1605, £40 10s.; in 1626, £44 10s.; in 1718, £46 14s. 6d.—about its present price.

The discovery of America, and the importation from thence into Europe of the precious metals, caused a great social revolution. A century before this epoch, the price of a quarter of wheat was 6s.; a century after, it was six times that sum; all other commodities proportionately increased in value.

Humboldt calculated that the quantity of gold extracted from the mines of South America, up to the commencement of the present century, was 81,582,252 oz., which, at the present standard, would be, in British sterling money, about £317,830,856. To this may be added about £5,000,000 plundered by the Spaniards from the natives of America. The quantity in Europe, previous to the discovery of America, was estimated at £34,000,000 in coin, and about £20,000,000 hoarded or employed in plate: the production of Europe, in three centuries, about £35,000,000—making a total, in the year 1800, of nearly £412,000,000 sterling, irrespective of the loss by abrasion, gilding, hiding, shipwreck, &c.

The annual produce of all the American mines before the revolution of the Spanish colonies is stated to have been:—

Mines.	Mares of		Value in dollars.
	Gold.	Silver.	
New Spain	7,000	2,338,220	23,000,000
Peru	3,400	611,090	6,240,000
Buenos Ayres	2,200	481,830	4,850,000
New Granada	20,505	—	2,990,000
Chili	5,212	29,700	1,000,000
Total, Spanish America	38,317	3,460,840	3,808,000
„ Brazil	29,900	—	4,360,000
„ Spanish & Portuguese America } } (	68,217	3,460,840	43,500,000

Taking the dollar at 4s., there would be a yearly yield of gold and silver to the amount of £8,700,000. How long this rate of production continued there are no means of ascertaining. With regard to Brazil, it has been noted that during the first thirty-seven years of gold-washing, the greatest annual yield was in 1754, when the produce was valued at £1,088,925. I gather from Parl. Paper, No. 476, laid before the House of Commons, 24th July, 1843, some data approximative of the yield of gold from mines in several of the states of South America.—1st. *Bogota*—value of gold coined at the mint from 1790 to 1829, \$46,374,298; annual average for 40 years, \$1,159,357, at 4s. per dollar=£231,874 sterl.

2nd. *Popayan*—mint bought, during the same period, gold to the value of \$27,593,792; annual average, \$689,844 = £137,968 sterl. [During these 40 years the returns for the latter are nearly equal to those of the former years.] 3rd. *Mexico*—mint return for 1836: gold coined, £114,733. 4th. *Potosi* (Bolivia)—gold minted (generally the only mode of ascertaining the quantity produced) in 1837, value, £39,506. 5th. *Cusco*—South Peru, 1837, value, £27,660. 6th. *Lima*—value of gold minted from 1790 to 1819, £3,222,234, annual average, £107,407; from 1820 to 1834, the annual average was only about £22,000. [The value of silver minted in Peru, in 1839, was £573,727.] 7th. *Santiago de Chili*—gold stamped at the mint from 1790 to 1830, value in dollars, 23,630,620 = £4,726,124, annual average, £115,515. [In 1834, the quantity of gold extracted from the mines in this republic was, 3,852 marcs, valued at £105,050 sterl.; the silver obtained was stated to be £296,883.]

Silver constitutes the principal yield of the Mexican mines. In 1836, the total produce of gold and silver, including the illicit export, was valued by the British consul-general at £3,400,000 sterl. The principal mining districts of Peru where silver is obtained are, “Puno, Lampa, Chimbaya, and Paucartambo, and, in general, all the rivers that descend along the eastern declivity of the great Eastern Cordillera of the Andes, towards the affluents of the Amazon.”—[Report of Mr. Consul-General Pentland to Viscount Palmerston, 1 July, 1838.]

As it is difficult to obtain correct returns from the South American republics, owing to their anarchy, the concealment of mining operations, and the illicit exportations of the precious metals, we may safely assume that the figures here officially stated do not represent more than half the yield of gold.

The production throughout the world, during the first half of the present century, is supposed to have averaged about £5,000,000 sterling per annum = £250,000,000—which, not allowing for consumption, would show a grand total of gold in existence, in the year 1851, (excluding California and Australia), of £662,000,000 sterling.

If we allow the consumption for 350 years to have averaged about £1,000,000 sterling

* By some authorities, the quantity of gold coin in the world, in 1850, is supposed to have been equal to £150,000,000. Others rate the coin and bullion as high as £600,000,000 gold, and that of silver at £1,200,000,000. M. Leon Faucher estimates that France possesses silver to the value of £134,000,000 sterling, of which 120 million consists of coin; the gold coinage belonging to France is probably not less than thirty million sterling.

† Taking the cubic yard of gold at £2,000,000, all the gold known to be at present in circulation throughout the world, might, it is calculated, if melted into ingots, be contained in a cellar 24 feet square by 16 feet high.

‡ Parl. Paper, No. 45, of 18th February, 1845, on the mines of Siberia. Information furnished by H.M. ambassador at St. Petersburg.

§ The auriferous sands of the mines of Yegoro Kanuiski produce 1 lb. troy to every 140 tons; at Toulubinsk, to every 190 tons; and at Marydink,

per annum = £350,000,000, the quantity in use, as coin, plate, and ingots, would be £312,000,000; and, judging from the stock in England, as coin and ingots—say £70,000,000—it appears probable that £250,000,000 sterling* would nearly represent the gold existing in Europe at the period of the discoveries in California and in Australia—which, together with Russia (since 1838), now constitute the main sources of supply.†

The quantity of gold produced in the Russian territories for thirteen years—from 1830 to 1842 inclusive—is stated, on the authority of the imperial government,† to have been 6,171 *pounds*, at 36 lbs. avoirdupois = 222,156 lbs. = 3,554,496 oz., at 60s. per oz. = £10,663,488, or on an average, £820,268 per annum. This gold was the produce of the Uralian (Ouralian) mountains and of Siberia: the former yielded, during the thirteen years, 147,888, and the latter, 74,268 lbs., avoirdupois. At both places there are mines belonging to the crown, and also to private individuals. During the period under review, the crown obtained from the Ural, 64,939, and from Siberia, 8,928 lbs.: and individuals, 82,948, and 65,331 lbs., avoirdupois. The Uralian yield was nearly stationary from 1830 to 1842; that of Siberia increased from 191, to 21,816 lbs., avoirdupois.

The largest gold-field at present explored in Siberia, is said to be that called *Yenisayisk*, § probably formed by the deposits of the *Yenisaye* and *Angara*, which flow in a north to south direction, though the highlands in which they originate have a winding course from east to west; the western portion, forming the irregular mass, is termed the Lesser Altai. ||

to every 213 tons, of material. The Victoria diggers grumble at a cart-load yielding only an ounce or two; and expect a tin-dish, containing half a cubic foot of earth, to yield at least £5 worth of gold. In Brazil, the solid rock, crushed by machinery, yields, after careful scientific treatment, half an ounce of gold to one ton of stone.

|| A geologist of ability, C. E. Austin, referring to this circumstance, objects to the assertion that gold is only found in mountain chains which run north and south; and that these chains lie in meridian lines which divide the globe into four nearly equal parts. Mr. Austin says, that south of the Lesser Altai “are the *Torbogotai* mountains, which run north-west and south-east, and whence the Chinese derive much gold. The chain running from the Altai mountains, nearly to Lake Baikal, namely, the Sayan, in which the *Yenisaye* and *Angara* take their rise, runs nearly east and west, and contains very large and rich gold districts. The *Oblaketnoi* chain, east of the Baikal,

There is an abundance of gold in Hungary; probably also in several other European countries; and in Syria and various parts of Asia. The metal has been found in quartz lodes, in Wales, at the *Ogofan*, in Carmarthenshire, from the time of the Romans to the present period; also, in granite, at North Tawton, Devon; at St. Just, in Cornwall; in Westmoreland, Scotland, and other parts of the United Kingdom. In Ireland, gold must have been extensively obtained in former ages, as evidenced by the various articles made of that metal, and now found in bogs and other places beneath the present surface of the country. The western and eastern coasts of Africa have large gold *placers*, but the yield is small. Virginia, and some other parts of the United States, also furnish annually a limited quantity. Gold will probably be extensively obtained in India: it is known to abound in Japan.

With the foregoing data, although very imperfect, and, in some respects, contradictory, an idea may be formed of the effect of the Californian and Australian discoveries on the value of property and the extension of commerce among the civilized nations of the world; but especially on England, which, of all other countries, most required a more adequate representation of her intrinsic wealth. The quantity of gold yielded by California since its discovery, in 1848, cannot be very accurately stated; the receipts from thence at the United States mint and its branches, up to January, 1854, amounted to about £42,000,000 sterling.* One of the

best-informed writers on the statistics of money,† considers that to the above must be added £18,000,000 for export to other countries and retained for home circulation, showing a total, in five years and ten months, of £66,000,000, on an average, about £10,000,000 per annum. The Australian yield for part of 1851, and the whole of 1852, is estimated at £15,000,000. The amount collected for 1853 is not yet ascertained; it will probably equal that of 1851-2; furnishing a total, in two years and a few months, of £30,000,000.

Estimating the annual produce of all other auriferous countries at £5,000,000, we find an addition made from California, between 1848 and 1854, of £60,000,000, and from Australia, between the last quarter of 1851, to the end of 1853, of £30,000,000 = £90,000,000. This extension must ultimately affect prices and wages throughout the civilized world, as it has already done those of England, by causing a considerable addition to our coinage, and enlarged issues of paper-money based thereon.

It is supposed that the gold and silver coin in the United Kingdom is from fifty to sixty million sterling. The following shows the amount of gold and silver coinage in England, from the accession of Elizabeth, November 17, 1558 (sixty-six years after the discovery of America), and that of the United Kingdom, from the accession of James I. (1603) to the year ending December, 1853, given on the authority of Mr. Birkmyre, except 1853, furnished by sir John Herschell:—

Reign.	Date.	Years	Gold.	Average Yearly.	Silver.	Average Yearly.	Total Money.
			£	£	£	£	£
Elizabeth . . .	Nov. 17, 1558, to March 24, 1603.	44	3,900,000	88,636	1,932,000	43,909	5,832,000
James I. . . .	March 24, 1603, to March 27, 1625	22	3,666,389	166,654	1,807,277	82,149	5,473,666
Charles I. . . .	March 27, 1625, to Jan. 30, 1649	24	3,465,185	150,660	9,776,544	425,067	13,241,729
Cromwell . . .	Dec. —, 1653, to Sept. 3, 1658 . . .	5	—	—	—	—	—
Charles II. . . .	May 2, 1660, to Feb. 6, 1685 . . .	25	4,177,253	189,875	3,722,180	169,190	7,899,433
James II. . . .	Feb. 6, 1685, to Feb. 13, 1689 . . .	4	2,113,638	528,429	2,115,115	520,778	4,228,753
William and Mary	Feb. 13, 1689, to March 8, 1702 . . .	13	2,314,889	192,907	7,093,074	591,089	9,407,963
Anne	March 8, 1702, to Aug. 1, 1714 . . .	12	2,484,531	207,044	618,212	51,617	3,102,743
George I.	Aug. 1, 1714, to June 11, 1727 . . .	13	8,492,876	653,298	233,045	17,926	8,725,921
George II.	June 11, 1727, to Oct. 25, 1760 . . .	33	11,662,216	353,400	304,360	9,223	11,966,576
George III.	Oct. 25, 1760, to Jan. 29, 1820 . . .	60	75,753,443	1,262,557	6,996,765	114,701	82,750,208
George IV.	Jan. 29, 1820, to June 27, 1830 . . .	10	33,147,700	3,147,700	2,216,168	221,616	35,363,868
William IV.	June 27, 1830, to June 20, 1837 . . .	7	14,000,000	2,000,000	1,200,000	171,428	15,200,000
Victoria	June 20, 1837, to Dec. 31, 1850 . . .	13	36,008,247	2,724,744	2,624,744	201,903	38,632,991
"	1851	1	4,400,411	4,400,411	87,868	87,868	4,488,279
"	1852	1	8,742,270	8,742,270	189,596	189,596	8,931,866
"	1853	1	11,952,391	11,952,391	701,544	701,544	12,653,935
Totals			226,281,439		41,618,492		267,899,931

is supposed to be still richer in gold. Its course is by no means perfectly north and south. To the south of the Yablonovue mountains, running east and west, which separate Daouria from the province of Yakoutsk, are also large gold-fields."

* During the year 1853 the deposits amounted to £11,130,000 sterling. In California, the total produce is estimated at 260,000,000 dollars—at 4s. = £65,000,000 sterling.

† M. B. Sampson, Esq

The amount of gold and silver coined in the above period, was £267,899,931; or on an average of £908,135 per annum.*

The augmentation, and, consequently, diminished purchasing power, of gold in the European markets, causes an increase in the price of silver, as well as of every other commodity whose cost is regulated

by a given quantity of gold. Until recently, the relative value of silver to standard† gold, weight for weight, was 15 to 1. Mr. Westgarth has prepared a table showing the proportion of silver to gold annually supplied to the world in 1800, and since the Californian and Australian discoveries—(1848-53)—gold 1 or unity:—

Years.	Quantity in oz.		Value in £ Sterling		Proportion of Silver.	
	Silver.	Gold.	Silver.	Gold.	By Weight.	By Value.
1800	30,000,000	814,500	7,840,000	3,258,000	38½	23
1848	33,500,000	2,000,000	8,630,000	8,000,000	16½	110
1850	36,000,000	4,250,000	9,000,000	17,000,000	8½	13
1851	38,000,000	5,500,000	9,500,000	22,000,000	7	3
1852	40,000,000	9,250,000	10,000,000	37,000,000	4½	3
1853	42,000,000	12,000,000	10,500,000	48,000,000	3	4

Unless there be a discovery of silver mines proportionate to those of gold, it is difficult to predicate what may be in future the relative value of the two metals. For household use and the fine arts, gold will always be more in demand than silver, owing to its more attractive colour, greater malleability, and being less liable to oxydization or tarnish; but should this beautiful metal ultimately become as abundant as copper or tin, then the defect of steadiness in price would render it inferior to silver as a medium of exchange for measuring the cost of commodities. In Britain, where silver is now only a legal tender in payment of debts to the amount of 40s., and where, until 1844, it was not even allowed to count as bullion, to enable the *Bank of England* to issue notes thereon, there has been little inducement to accumulate silver beyond the exigencies of our small coinage; whenever brought to this market it has, therefore, been re-shipped at a small profit to India and China, as also to France and other countries of Europe, where it constitutes the monetary standard: by the unwise and selfish

attempts of the bullionists, since 1819, to measure everything by gold, the country has suffered in various ways, and we now see one of its effects in the scarcity of silver.

The well-informed editor of the *Bankers' Circular* (Mr. Eyres), states the quantity of gold and silver received at the Bank of England, in three years, to have been thus—

Years.	Gold.	Silver.
	£	£
1850	5,939,956	4,880,211
1851	13,379,674	4,711,873
1852	18,720,866	5,591,892
Totals . .	38,040,496	15,183,976
In 1853 .	19,775,664	5,174,118

Showing a total receipt of bullion in four years, ending 1853, of £78,174,254. Nevertheless, as will be seen in the table on the next page, the Bank of England, in 1853, had no silver bullion left, and but £67,079 in coin; and at the commencement of 1854, the silver in the Bank was only £154,272, out of an aggregate purchase, in four years, of £20,358,094.

* The great increase in the gold coinage in the United Kingdom, in the seven years ending 1847, was partly caused by the calling in of all the light gold coins, of which 2,779,000 oz., equal to 101 tons troy, or 85 tons avoirdupois, valued at £3 17s. 10½d. per ounce=£10,820,731, were delivered by the Bank of England to the Mint between the 1st of January, 1842, and the 5th of February, 1844. Deducting the £10,820,731 from the £30,264,929 coined in those seven years, leaves £19,444,198 for gold bars or foreign coin, which being divided by seven, is equal to an average yearly coinage of £2,777,742 of other gold than light British coin. In the East Indies, the gold coinage in the seven years ending the 1st of May, 1847, was £131,803, or an average yearly

coinage of £23,125, while the coinage of silver, in the same time, was £14,086,959, equal to a yearly coinage of £2,012,422. It appears, therefore, that both metals were coined in British India, in the seven years ending the first of May, 1847, to the extent of £2,035,547 per annum.—*Birkmyre*.

† Standard gold is mechanically blended or alloyed with other metals to render it harder, less liable to abrasion, and waste by use and friction; in technical phraseology, it is "twenty-two carats fine;" twenty-four carats being, by custom, taken as the representative of pure gold. The usual density of gold, taking water as the unit 1, is 19·3; the density of Australian gold varied from 13 to 17. Some of the Victoria gold was purer than standard gold.

478 GOLD AND SILVER IN THE BANK OF ENGLAND, AND COINAGE.

The following shows the amount and value of specie and bullion in the Bank of England on the 1st of January, 1847-'48-'49-'50-'51-'52-'53 and 1854, distinguishing gold from silver, specie from bullion, and foreign from British coin:—

Years.	Gold.			Silver.			Total.
	Bullion.	Coin, Foreign.	Coin, British.	Bullion.	Coin, Foreign.	Coin, British.	
	£	£	£	£	£	£	
1847	4,031,404	3,081,971	5,170,014	1,936,835	532,655	198,693	14,951,572
1848	1,177,669	3,607,502	6,081,100	944,342	402,717	190,920	12,404,250
1849	3,261,110	3,152,805	7,693,944	149,144	358,764	338,882	14,954,649
1850	3,867,493	3,813,428	8,587,650	77,744	199,333	474,832	17,020,480
1851	4,699,108	3,565,810	6,187,960	26,625	25,042	325,573	14,830,118
1852	5,503,772	5,772,435	5,997,437	4,625	28,750	250,522	17,557,541
1853	10,827,436	6,509,204	3,123,943	—	19,154	47,925	20,527,662
1854	6,865,990	3,237,880	5,594,757	None.	None.	154,272	15,852,899

The increasing population of Europe and of America necessitates an enlarged currency, and gold is being resorted to as a substitute for silver; in the United States, half and quarter *eagles* form a useful portion of the circulating medium: a five-shilling gold piece would be equally portable and beneficial for England.

During the six years ending with December, 1853, England coined, of sovereigns, £28,069,192; of half-sovereigns, 6,295,342 pieces—value, £3,147,672: total of gold, £31,216,864. The silver coinage, for the same period, amounted to £1,263,139.

The gold coinage* of England, France, and

the United States of America, since 1848' in pounds sterling, is thus shown—

Years.	England.	France.	U. States.	Total.
	£	£	£	£
1848	2,451,999	1,587,908	179,000	4,218,908
1849	2,177,955	1,084,380	1,415,000	4,677,380
1850	1,491,836	3,407,692	7,388,000	12,287,692
1851	4,400,411	10,183,328	10,626,000	25,209,328
1852	8,742,270	1,090,000	10,803,000	20,635,000
1853	11,952,391	13,218,536	10,377,776	35,548,703
Totals	31,216,864	30,571,844	40,788,776	102,577,011

Within the period of six years, the above three states have added more than £102,000,000 of gold coins to the previously existing circulation of the world.† Mr. Westgarth, to

counts, and in transacting all bargains would, under this system, be very great; and such as, if once experienced, must command general approval. Mr. W. Debonaire Haggard, who has for many years been at the head of the bullion-office in the *Bank of England*—to whose exertions we owe the partial introduction of silver as a basis for the issue of bank notes in the act of 1844—and who has bestowed much practical attention to the standard of value, strongly recommends the change above stated, both as to the use of the *ounce of gold* in the buying and selling of commodities, and to the adoption of a decimal system of account. This experienced authority remarks, in reference to the former, and in reply to an objection that might be urged, “in adopting a bullion standard it is not necessary to have bars of various reports converted into one of a uniform character; to do so would be a useless expense and inconvenience; the assay-master's report is a safe voucher for the quality of the bar; for the Bank of England requires three trials for the report of each bar. When the assay-papers are brought to the Bank by the assayer, the reports are re-entered in a book against the respective bars, then brought into standard weight, when they are ready for delivery.”—[*Bankers' Circular*, 28th May, 1853, p. 764.] The great mass of monetary transactions are now carried on by cheques—almost every sum above £5—and many below it are paid by an order on a banker; and the coin passing from hand to hand is comparatively small. The substitution of bullion for sovereigns would not interfere with a paper circula-

* Mr. Birkmyre, who has paid great attention to the subject, calculates that during the fifty years ending 1850, the United Kingdom coined £100,805,180; France, £52,660,682; United States, £23,130,221 = £176,896,083, or per annum, £3,531,921 of gold: and during the same period there was coined, in the United Kingdom, £14,058,000; in France, £149,722,000; and in the United States, £15,871,000 = £179,651,000 of silver. The total gold and silver coinage of these three countries, in fifty years, was therefore equal to £256,547,083: or, on an average, more than £5,000,000 sterling per annum. In 1853 the coinage of France amounted to £14,101,120; that of the United States to £11,961,702 sterling; and that of England to £12,663,009: the coinage of three mints only, being in one year, £38,725,831 sterling.

† It would be very desirable to have the standard of value represented in bullion instead of in coin: one ounce of gold, of a given standard, does not suffer like coin by abrasion—provides a sure par of exchange with our colonies and in transactions between foreign nations, and saves a considerable expense in coinage. The pound sterling might still be used as a denominational money of account, representative of a quarter of an ounce of gold, divisible into a thousand *mils* or farthings, while the intermediate monies of account would be in decimal proportions. By this reform we should obtain a decimal coinage and an unvarying representative of value *by* (not *with*) which goods are exchanged. The simplicity in keeping public and private ac-

whom I am indebted for part of the above table, has not been able to indicate the coinage of other countries: it has most probably been increased in all; and this will account, in some degree, for the comparatively small effect yet produced by the augmented production of gold. Undoubtedly England has already largely benefited by the supplies from California and Australia. In the middle of 1847 there was little more than £1,000,000 sterling in gold *bullion* in the coffers of the Bank of England; and the entire gold and silver bullion and coin in the issue department, which governs the issue of bank notes, was only from seven to eight million sterling: the "screw" was put on—in other words, the currency was contracted, discounts diminished, and 460 mercantile firms became bankrupt, whose liabilities were estimated at nearly sixty million sterling, and our export trade materially diminished. In 1849–'50 the effect of the gold discoveries in California began to be felt, and commerce revived: in 1851–2, those of Australia swelled the auriferous tide; the bullion in the issuing department of the Bank of England increased to nearly £22,000,000 sterling, almost entirely of gold, notwithstanding an immense export to different countries for corn, tea, and other commodities, and there was a rapid and healthy spring in all branches of industry; wages rose, prices increased, and the public revenue augmented, despite large reductions, in taxation.* The potato famine in Ireland, short crops in Britain, and an increased power of consumption among the labouring classes, owing to higher wages, have necessitated large importations of food.

From 1847 to the 10th of October, 1853,

tion: a £4 note would represent one oz. of gold; a £20 note, five oz.; £100 note, twenty-five oz.; and so on. Should the abundance of gold cause, as some suppose possible, a depreciation in relation to silver—i.e. should the troy pound weight of silver, which is now coined into 66s., so rise in price that it may be necessary (according to the opinion of Mr. D. Forbes Campbell) to convert the same weight into 80 or even 100 shillings—to keep the coin out of the melting-pot—then the advantage of a *bullion* gold standard would be more evident, and the rise or fall of silver, as a mercantile commodity, would not affect pecuniary transactions.

* Revenue in 1853, £54,430,344; exp. £51,174,839; showing a surplus of £3,255,505.

† See *Commercial Barometer*, from 1845 to 1853.

‡ The *known* export of bullion from London only, during the year 1853, was—gold, to the value of £15,450,800; silver, £5,745,800 = £21,196,600. Messrs. Haggard and Pixley, the intelligent bullion-

we paid for grain, £110,639,253 sterling, and for live cattle (oxen, sheep, and pigs), £6,745,849: total, £117,385,102,† or, on an average, about £17,000,000 per annum for grain and meat. But for the Australian and Californian gold we should have found it difficult to procure these indispensable supplies, and at the same time have stood the heavy drain of bullion, which was exported during the year 1853, to the amount of more than £30,000,000 sterling.‡ Were the production of gold to be stopped, there would be an immediate check to every description of industry; happily, however, there are no indications of such a misfortune: all the mineralogical investigations in Australia pronounce that auriferous field to be almost inexhaustible; and it is to be hoped that no impediment of licenses or official restraints will discourage men from pursuing a branch of most useful labour, whose results are of deep national importance.

California fortunately does not exhibit any symptoms of its gold being exhausted: the yield of 1853 amounted to \$67,873,505, at 4s. the dollar = £13,574,701 sterling; and this, although water was scarce: tunnelling was, however, coming into use, by which subterranean beds of rivers and creeks had been discovered, and proved very rich. New surface-diggings were recently found on one of the eastern head branches of the Sacramento; and the Pilot Creek canal (twenty miles in length), intended to furnish water to some of the most extensive and valuable dry places, was nearly completed. The population, who require no license to work the mines, is abundant: it consisted, on the 30th of December, 1853, in round numbers, of 215,000 Americans, 25,000

brokers in London, who have prepared a statement of the shipments to each country, consider that a sum of at least £8,000,000 must be added to the above for the export during the year from Liverpool and other towns in the United Kingdom: to these sums should be added, the quantity of coin taken abroad by emigrants and travellers—which is not ascertainable. The whole export of bullion for 1853 has, therefore, been equivalent to upwards of £30,000,000 sterling: which shows an enormous drain. The largest shipments from London have been—to India, £3,422,500; to China, £2,202,400; to Australia, £3,974,400; Hamburg, Belgium, and Rotterdam, £7,615,000; France, £1,805,800; Peninsula and Mediterranean, £1,080,200. India and China took the greater part of the silver, viz., £5,122,100. The estimated produce of gold during 1853 is—for California, £14,000,000; Australia, £15,000,000; Russia, £4,000,000; other places, £2,000,000 = £35,000,000.

Germans, 25,000 French, 20,000 of Spanish blood, 17,000 Chinese, 5,000 miscellaneous foreigners, 20,000 Indians, and 2,500 negroes: total, say 300,000. Of these, only about 65,000 are women, and 30,000 children.

Central and Southern America possess inexhaustible gold-mines, which must, ere long, be made productive. In December, 1853, the Mexican government officially notified the discovery of gold *placers* in several rivers running through the state of Guerrero—localities which are said to agree with those described by Cortez, in his communication to the king of Spain, as the districts from which gold was washed for Montezuma. The cessation of slavery will tend to increase the collection—

*“Where Afric’s sunny fountains
Roll down its golden sands.”*

In both Australia and California deep sinking may be required instead of surface-washing; consequently, some delay and heavy expense may occur; but mineralogists, in both countries, do not doubt an ultimate large and permanent yield.

On a review of the whole field of production, I think we may confidently look forward to a steadily-increasing supply of the chief precious metal.*

* The *Australian and New Zealand Gazette*, published weekly in London, by Stewart and Murray, 15, Old Bailey, contains valuable information respecting the gold-fields, and generally as regards all our colonies in the Southern Pacific. The details of intelligence are well condensed and admirably arranged; the editorial department manifests remarkable ability; and the work, bound in yearly volumes, with a copious index, is useful as a work of reference.

† I am aware that this estimate of £250,000,000, as the amount of available gold in the civilized world in 1848, is small compared with other opinions; but nothing that I have read of or seen in the principal countries of Europe, America, and Asia induces me to rate the amount above that sum. Mr. Danson (see *Statistical Journal*, vol. xiv., 1851) supposes the quantity of gold obtained in North and South America, from 1492 to 1848—356 years—to have been £433,000,000; but his deduction for wear and tear, casualties, &c., is only $\frac{1}{4}$ from 1492 to 1803, and $\frac{3}{4}$ per cent. from 1803 to 1848—say £2,400,000; while his deduction for supposed quantities sent from America elsewhere than to Europe, for the whole 356 years, is only £4,500,000; leaving, therefore, £426,100,000 as the quantity of the above gold “existing, in various forms, in Europe and North and South America” in 1848; [*New Supplies of Gold*, by W. Newmarch, London, 1853, p. 4.] Without questioning the estimate of receipts—433 *mil*, which rests on very vague data—it must be evident that the deductions are far too small: India and China, and the adjacent regions were, for at least two centuries, immense absorbers of the precious metals;

The estimated additions would stand thus for the next ten years—

Countries.	One Year.	Ten Years.
	£	£
Australia, per annum . .	12,000,000	120,000,000
California ” . .	12,000,000	120,000,000
Russia ” . .	3,500,000	35,000,000
N. and S. America, including Brazil, per annum	3,000,000	30,000,000
Africa, Asia, and all other countries, per annum . .	1,500,000	15,000,000
Totals	32,000,000	320,000,000

Allowing £2,000,000 per annum for abrasion, loss, gilding, and export to Asia = £20,000,000, there would be an augmentation, in ten years, of £300,000,000 sterling, to a quantity estimated, in 1850, at £250,000,000.† To this we must add the yield of California, Australia, and other countries, from 1850 to the end of 1853—say £60,000,000—so that, in 1864, the probable quantity of gold available for active circulation would be about £600,000,000.

It is not within the province of this work to examine the permanent effects producible by Australian and Californian gold on the condition of England. On some future occasion I hope to have an opportunity of discussing this very important subject.

the Spaniards exported largely in their annual galleons from Acapulco, and other ports on the Pacific, to Manilla; the English and Dutch East India companies bought the greater part of their oriental cargoes with bullion, and the Spanish and Portuguese maintained their foreign dominions in the west and in the east with the gold and silver obtained from Mexico and Peru. If we allow only half-a-million annually for the whole period of 356 years (between 1492 and 1848), there will be a deduction of 178 *mil* from 433 *mil*; leaving 255 *mil*, as the remaining product, to be added to the limited quantity in Europe before the discovery of America, which is supposed to have been 12 *mil*. Mr. Newmarch is more vague than Mr. Danson as to the estimated quantity of gold in Europe and America in 1848: his statement of the produce of different countries up to this period is—from America, 426 *mil*; Europe, 25 *mil*; Russia, 44 *mil*; Africa, 100 *mil*—total, 595 *mil*; which, added to 12 *mil* existing in the year 1500, shows 607 *mil* pounds sterling. But this view will not bear investigation—especially as regards Africa, which has not probably furnished a quarter of the sum here laid down. Then, as regards the deductions for exportation to Asia, wear and tear of coin, gilding, ornaments, losses by shipwreck, fire, hoarding, and casualties, Mr. Newmarch allows no more than 50 *mil* for nearly three-and-a-half centuries—less, in fact, than £150,000 a-year. (London requires 60,000 ounces annually for gilding pottery, &c.) Other estimates are still more untenable than the foregoing, and confirm the opinion I have expressed in the text.

CHAPTER II.

SOCIAL PROGRESS OF THE FOUR AUSTRALIAN COLONIES—NEW SOUTH WALES—VICTORIA—SOUTH AUSTRALIA—AND WESTERN AUSTRALIA—SINCE THE GOLD DISCOVERIES.

It is difficult to delineate, by descriptive writing, the rapid growth of a young, prosperous, and expansive colony: the transition from youth to manhood is marked not only by increase of stature and of strength, but also by different modes of thinking—by a diminishing obedience to authority, an augmenting reverence for reason, and a desire to advance towards independence; or, at any rate, to be released from a state of pupilage.

These successive phases are strikingly manifested in a rising community; and under the just and conciliatory policy of the British government in the rule of its dependencies, at the present day, nascent developments are fostered into maturity, and full scope is given for the exercise of faculties calculated to improve the physical, mental, and moral growth of the offshoots of a body-politic, which desires to link together its wide-spread members by sympathetic chords, by community of interest, and by the ties of a common origin, language, and institutions, into one harmonious empire—which, sooner or later, must, by its pervading influence, affect the condition of all mankind.

In no part of our oceanic dominion can the birth, infancy, and adolescence of a young and important nation be so clearly traced as in the island-continent of Australia: three of the settlements on its shores are of comparatively recent formation; the most ancient, New South Wales, is in reality little more than half a century old; and all have been elevated into their present importance within the last decade. In order, therefore, to convey as clear an idea of their existing condition as statistics will permit, we shall examine the returns from each colony since the date of those given in previous pages; in order that this "Supplemental Division" may furnish materials for observation and reflection, in relation to their present state and future prospects.*

* New South Wales was separated from Victoria on the 1st of July, 1851, and formed into a distinct colony: the returns up to that period are somewhat confused; but, so far as they can be rendered distinct, they will be found in the *Appendix*.

To begin with—

NEW SOUTH WALES.

The most prominent feature in the progress of a new settlement, is the amount and condition of its—

Population.—In chap. iii., pp. 166 to 179, full details are given, under this head, from the year 1788 to 1848. In 1851, a census of the inhabitants of the colony (more complete than any previous return) was obtained; and as it forms a good basis for ulterior examination, the principal facts are printed in an *Appendix*.

The increase of the population between the 2nd of May, 1846 (see p. 168), and the 1st of March, 1851, is thus shown—

Years.	Males.	Females.	Total.
1851	106,229	81,014	187,243
1846	92,389	62,145	154,534
Increase . .	13,840	18,869	32,709

This does not indicate a rapid augmentation in five years, during which there was a continuous immigration and an increase from births; but it is probable there was a large emigration to the adjoining territory of Port Phillip (Victoria), and several thousand able-bodied men departed to the gold-diggings in California.

The number of youths, of both sexes, at the two periods, was—

Years.	Under 14 Years of Age.		Total.
	Males.	Females.	
1851	36,651	36,264	72,915
1846	27,285	26,886	54,171
Increase . .	9,366	9,378	18,744

Years.	Under 21 Years of Age.		Total.
	Males.	Females.	
1851	45,698	47,184	92,882
1846	33,371	33,272	66,643
Increase . .	12,227	13,912	26,239

The population between 21 and 45 years of age, was—

Years.	Males.	Females.	Total.
1851	44,697	27,593	72,290
1846	46,811	24,561	71,372
Decrease . .	2,114	—	—
Increase . .	—	3,032	912

From 45 years of age and upwards—

Years.	Males.	Females.	Total.
1851	15,834	6,247	22,081
1846	9,572	4,312	13,884
Increase . .	6,262	1,935	8,197

It would appear, from the foregoing, that there was a large emigration of the adult male population.

Within the space of 20 years (from the 1st of January, 1832 to the 31st of December, 1851), there arrived in New South Wales, 85,179 immigrants (see *Appendix* for details); of these, 20,372 came at their own cost, and 64,807 at the expense of the colony. Of the total, there were, of 14 years of age and upwards—males, 32,582; females, 31,006: under 14 years of age, 21,591. There were also clergymen and teachers, &c., introduced at the public expense: the whole number (including bounty immigrants), of all denominations, thus paid for, was 65,477; and the charge defrayed out of the territorial revenues of the colony, was £1,134,511, or about £17 each. It may be useful to state in detail some of the items of this heavy disbursement thus incurred by the colonists—viz., bounties for the introduction of female immigrants, under the direction of the Immigration Board, £32,985; bounties for the introduction of immigrants by private individuals, £451,678; passages of mechanics and labourers forwarded by government, £10,430; freight, victualling, and other expenses of vessels chartered by government, £221,818; gratuities to surgeons, superintendants, masters, officers, overseers, and others, £36,001; pay and allowances of surgeon-superintendants of vessels chartered by government, £18,039; lodging, maintenance, and other expenses of immigrants after arrival, £33,756; salaries and contingent expenses of agents for immigration in the colony, £14,447; salary and expenses of agent-general for immigration in England,

£6,317; other expenses of land and immigration commissioners in England, £4,794; advances from colonial treasury to the land and immigration commissioners, £266,468; outfit and passages of clergymen (number, 88) and teachers, £11,010; quarantine expenses, £24,743.

Of the immigrants who arrived in the colony in 1852, at the public expense, 2,074 were Protestants; 1,862 Roman Catholics, and 1,045 other denomination of Christians.

Of the above, 1,939 were from England and Wales; 2,417 from Ireland; 616 from Scotland; and nine from different other countries.

Number of immigrants the year before and the year after the gold-discovery:—

Years ending December.	Fourteen Years and upwards.	Under 14 years, but not under 12 months.	Under 12 months	Males.	Females.	Total.
1850	3,665	513	96	1,686	2,688	4,374
1851	2,043	480	79	1,419	1,183	2,602
1852	6,747	2,015	—	—	—	8,762

An examination of the census returns will remove the unjust imputation, that New South Wales is “a colony of convicts.” Of 187,243 persons—81,226 males, and 76,695 females—157,921 were born in the colony, or arrived free: 26,629 (males, 22,397; females, 4,232) had been prisoners, but were, at the date of the census, in March, 1851, free: the remaining population stood thus:—

Prisoners.	Males.	Females.	Total.
Holding tickets-of-leave	1,986	46	2,032
Prisoners in government employ	594	32	626
Prisoners in private assignment	26	9	35
Total under sentence	2,606	87	2,693

Every year the old convict population is being diminished by death or emancipation. In December, 1852, the number remaining was 1,722; of whom, 1,363 held tickets-of-leave; 100 males, and 6 females, were lunatics; 92 males, and 18 females, were invalids; 72 were under sentence in iron-gangs on the roads; 40 under detention; 10 in gaol; and 20 attached to different government departments. In four or five

years more the convict population from the United Kingdom will be entirely extinct.

Nearly one-half the inhabitants have been born in Australia since 1787. The nationality is thus indicated in March, 1851:—

Nations.	Males.	Females.	Total.
Born in the Colony . . .	40,665	40,726	81,391
„ England . . .	35,021	16,101	51,122
„ Wales . . .	376	182	558
„ Ireland . . .	20,440	18,219	38,659
„ Scotland . . .	6,531	4,376	10,907
„ Other parts of the British dominions . . .	1,118	837	1,955
„ Foreign countries	2,078	573	2,651
Total	106,229	81,014	187,243

In no part of the British empire are the mass of the people better housed than in New South Wales. In March, 1851, 187,243 persons possessed 31,662 houses—six to each habitation: 13,303 were constructed of stone or brick; and 18,152 of wood; many of them being substantial edifices. Sydney, the capital, contained 11,742 houses, of which 8,831 were built of brick or stone, and would bear comparison with the better class of London tenements: the population dwelling therein was 53,924; of whom 9,684 resided in the contiguous suburbs: the number of mouths in each house was nearly four and a-half.

The census occupation shows that 12,423 persons were engaged in commerce, trade, or manufactures; 11,898 in agriculture; 15,619 in grazing (in care of sheep, horses, and cattle); 930 in horticulture; 5,857 as mechanics and artificers; and 10,875 in other employments. The domestic servants were in number—male, 3,853; female, 6,594. The professions numbered—clerical, 283; legal, 207; medical, 326. Other educated persons, 2,188. The paupers and pensioners were 694, or one in every 270 inhabitants—(the proportion in England, 1853, was about one in 20.)

The population, in relation to the area of the colony, stood thus, in 1851:—

Divisions.	Population.	Area in sq. miles.	Mouths to each sq. mile.
Settled Districts . . .	159,546	45,906	3.48
Squatting Districts . . .	27,697	275,673	0.10
Total	187,243	321,579	0.58

There was about half an individual to each square mile=640 acres, or 1,280 acres

to every mouth. If the county of Cumberland, containing Sydney, Parramatta, Liverpool, Windsor, Richmond, and other towns; and comprising a population of 81,114, on an area of 1,445 square miles (56 mouths to each square mile) be excluded, the paucity of inhabitants, even in the settled districts, will be more manifest. In many of the counties there is not one to a thousand acres of land. The squatting districts are still more thinly peopled; several are in the proportion of 10,000 acres to each person.

As might be expected, the cultivated land is very small: in December, 1852, the total number of acres under crop (see details in *Appendix*), and the waste land, stood thus:—

Land in—	Acres cultivated.	Acres Waste.	Cultivated proportion.
Counties	141,536	29,379,840	One acre in 200
Grazing districts	10,521	176,430,720	One acre in 17,000
Total	152,057*	205,810,560	One acre in 1,350

Allowing 20 acres of land to each individual, there is room in New South Wales for upwards of 10,000,000 inhabitants; and there would then be only 32 mouths to each square mile; or about one-tenth the population density of England.

Even with the still imperfect cultivation adopted in Australia (much of the land being sown amid the stumps of cut-down trees, in the midst of forest clearings, and very little of it manured), it appears that 116,621 acres were under crop, in 1852, with wheat, maize, barley, oats, rye, and millet; the yield amounted to 2,312,153 bushels of produce,† or, on an average, at the rate of 20 bushels of corn to the acre—a return that would be deemed satisfactory in the cultivation of the United Kingdom. As regards wheat, the average yield is 17, oats and barley 20, and maize 28, bushels to the acre: potatoes averaged nearly 70 cwt. to each acre planted. There can, therefore, be no want of bread for those who till the land.

Neither is there any deficiency of animal food, as shown by the quantity of live stock in January, 1852—viz., horned cattle, 1,375,257; sheep, 7,396,895; pigs, 65,510: thus, for each mouth, there was about eight oxen, nearly 40 sheep, and almost half a pig—to say nothing of poultry, which

* Of this, 30,626 acres are laid down for hay and sown grasses.

† See *Appendix*, for tabular view.

abound. And it may be remarked, that the domestic animals are increasing more rapidly than man.*

The latest return that has reached me does not indicate a large augmentation of population after the experience of a year and a-half—gold-digging—when it was expected there would have been an immense rush to the colony.

Inhabitants.	Males.	Females.	Total.
Population 31st December, 1851	113,032	84,136	197,168
Increase by Immigration	18,147	5,071	23,218
Births in 1852	4,000	3,866	7,866
Total	135,179	93,073	228,252
Decrease by Deaths	2,215	1,390	3,605
„ „ Departure	14,277	2,116	16,393
Total	16,492	3,506	19,998
Net Increase in one year	5,655	5,431	11,086
Estimated population 31st December, 1852	118,687	89,567	208,254

There is a constant migration going on between New South Wales and Victoria; therefore, the actual population of either cannot be very accurately stated.

There are no returns showing the number of coloured persons in the colony; viz., Chinese, South-Sea Islanders, and others: these must be considerable; and as they are almost entirely males, there will ultimately be a very mixed race—comprising the offspring of English, Welsh, Irish, Scotch, Germans, Yankees, Chinese, Hindoos, Feejees, and other varieties of mankind.

During the year 1852, there were, according to the Register—

Persuasion.	Births.	Marriages.	Deaths.
Church of England	3,576	860	1,927
Presbyterians	814	522	378
Wesleyan	535	97	199
Independents	69	25	46
Baptists	6	—	1
Church of Rome	2,843	664	1,040
Jews	23	7	14
Total	7,866	2,175	3,605

This shows a proportion of more than two births to each death.

The number of registered births to deaths were, during the years—

Births and Deaths.	1850.	1851.	1852.
Births	7,283	7,675	7,886
Deaths	2,585	2,600	3,605
Excess of Births.	4,698	5,075	4,281

The matrimonial state is thus shown:—

Marriages.	Males.	Females.
Married	30,002	30,363
Single	76,227	50,651

In the counties, the proportion of married to single, is about one-half; in the squatting districts, about one-fourth.

The state of education, at the period of the last census (1st of March, 1851), was not satisfactory: a summary of the returns gives the following view:—

Males.						Females.						Males.	Females.	Total.
Under 21 Years.			Above 21 Years.			Under 21 Years.			Above 21 Years.					
Cannot read.	Read only.	Read and write.	Cannot read.	Read only.	Read and write.	Cannot read.	Read only.	Read and write.	Cannot read.	Read only.	Read and write.			
22,772	8,240	14,686	12,475	7,222	40,834	22,253	9,593	15,338	7,010	6,842	19,978	106,229	81,014	187,243

* There have been large exportations of sheep and cattle to the southern colonies of late years, and especially to Victoria. The numbers boiled down for tallow have been very great.

In one district (Maitland) there were slaughtered, at four boiling-down establishments, in the year 1852—sheep, 82,215; horned cattle, 29,466; pigs, 726: which yielded 56,930 cwt. of tallow, and 9,275 cwt. of lard. In 1837, the export of tallow commenced with 500 cwt.: the amount annually increased to 128,090 cwt. in 1850, when 292,416

sheep, and 60,385 horned cattle were slaughtered, by 94 boiling establishments, for this quantity of tallow between 1844 and 1851 (inclusive), no less than 1,500,000 sheep, and 270,000 head of horned cattle, were boiled down for the above purpose.

What a contrast to the period when the straying into the woods, near Sydney, of two bulls and four cows was a serious loss, and the only remaining cow in the colony was obliged to be shot, on account of its dangerous wildness! See *Appendix*, for annual returns of the slaughtering establishments.

It appears, therefore, that 64,510 of the population were then unable to read or write: deducting 22,171 for children under the age of seven years, it shows an utter ignorance of 43,239; or almost one-fourth of the inhabitants. A large number of the persons in this state of mental destitution, were probably at one time prisoners; for it appears, that 19,845, or nearly one-half of the whole number unable to read or write, were above 21 years of age.

Of late years, great efforts have been in progress for the remedying of this serious evil of defective education: the progress of governmental schools has been, since 1840, satisfactory—

Years.	Number.	Scholars.
1840	149	8,574
1841	192	9,095
1842	232	10,233
1843	272	11,389
1844	313	12,590
1845	327	14,454
1846	338	16,263
1847	376	18,600
1848	382	18,989
1849	444	19,971
1850	493	21,384
1851	423	21,120
1852	351	24,391

The apparent diminution of schools in 1851-'2, has been owing to an augmentation of "National Schools;" and to the amalgamation of small denominational schools into one establishment.

The number of scholars at the different schools, of which the government have cognizance, is stated to be, in 1852—

Schools.	Males.	Females.	Total.
Protestant Orphan School .	82	80	162
Roman Catholic School . .	82	88	170
Total	164	168	332

Denominational Schools.

Denominations.	Schools	Males.	Females.	Total.
Church of England	92	5,582	4,633	10,215
Presbyterian	14	689	527	1,216
Wesleyan	8	468	369	777
Roman Catholic	49	2,322	2,213	4,535
National	50	1,998	1,660	3,658
Total	213	11,223	9,510	20,733

The private schools are in number 135, with 3,498 male, and 3,585 female scholars.

The total amount paid by government

for schools in 1852, was £31,118; and the amount from private funds, was £6,960.

The Sydney University, incorporated by the local legislature (act 14 Vict. No. 31), was inaugurated the 11th of October, 1852: it is liberally endowed, the object of the government being to provide a high standard of education—to present stations of eminence and emolument, calculated to awaken the ambition of students—and to cause an increasing appreciation of the moral, social, and even physical advantages, which education, when connected with Christianity, invariably confers. A sum of £50,000 has been voted by the local legislature to provide a suitable building for the institution. A valuable piece of ground (known as Grose-farm), at the southern side of the city, and 100 acres in extent, has been appropriated for the university site, and for a Church of England college, called St. Paul's, in connection, to which 20 acres are assigned; and for the building of which £7,000 is in course of subscription. It is proposed to make a similar grant to the Roman Catholics, when they are prepared to receive it; and the Presbyterian and other non-episcopal bodies will probably soon form a united college, and receive proportionate aid from the state.

The state of religion has been shown at p. 174. The ecclesiastical returns for 1852 exhibit the following facts. The number of clergymen in the colony is—

Denominations.	Paid wholly or in part by Government.	Supported wholly by voluntary Contributions.	Total.
Church of England	66	12	78
Presbyterian	14	18	32
Wesleyan	4	12	16
Independent	—	4	4
Roman Catholic	32	—	32
Jews	—	1	1
Total	116	47	163

The expenses paid by the state are—Church of England, £18,344; Presbyterian, £5,998; Wesleyan Methodists, £1,012; Church of Rome, £12,836; arrears of 1851, £4: total, £38,194.

This amount is divided as follows:—General revenue, schedule A, part 3, act 13 and 14 Vict., cap. 59, £35,123; gold revenue, £1,972; church and school estates' fund, £1,096; arrears of 1851, £4: total, £38,194.

It is understood that Sydney will in

future be the seat of an archbishopric, under whose jurisdiction the whole of the episcopal churches in the Australian settlements will be placed.

In continuation of the tabular views of crime, down to 1848, given at pp. 176-7, the following is subjoined:—

Convictions.	Years.			
	1849.	1850.	1851.	1852.
For Felony	437	451	461	422
Misdemeanour	97	104	113	105
Executions*	4	4	2	5
Law Cases tried	101	80	119	92

It is gratifying to observe that crime is rapidly diminishing; and still more so, that the number of executions has been so greatly lessened (see p. 177). During the eight years ending with 1852, there were hanged, at Sydney, 25 persons—on an average, three per annum: during the eight years ending with 1836, the death punishments amounted to 283, or, on an average, 35 were annually strangled. There is no fact connected with the history of this remarkable colony which it gives me such pleasure to record. I witnessed, with horror, at New South Wales and at Van Diemen's Land, the awful indifference to human life manifested by the authorities. Eight or ten persons would not unfrequently be hanged in one morning, with almost as little compunction as if they had been mad dogs; and the result, as might be expected, and as Ireland has lamentably testified, was an increase of crime.

I may not live to see the day—but come it must—when Christianity, having perfected her heaven-born mission, the life of no human being will be taken by his fellow-man under a perversion of the term, justice. Nothing short of a divine command, addressed, not to the Jews under the Old covenant, but to Christians under the New, can authorise the infliction of the penalty of death. The denunciatory text so often quoted, that "*whoso sheddeth man's blood, by man shall his blood be shed*" (Gen. ix. 6.), can hardly be construed into an injunction, if interpreted by other divine decrees, such as—"Vengeance (retribution) is mine; I will repay, saith the Lord" (Rom. xii. 19.)—"To me belongeth recompense" (Deut. xxxii. 35).

* The executions in previous years, viz., from 1837 to 1848, were—12; 14; 22; 8; 15; 9; 9; 8; 3; 1; 2; 4.

† The colonial convicts numbered 665; of whom, only 140 arrived free, or were born in the colony:

In the chapter from which the authority to hang our fellow-creatures is supposed to be derived, it is declared—"At the hand of every man—at the hand of every man's brother, will I require the life of man."—(Gen. ix. 5.) And the blessed gospel announces, that they who "*take the sword, shall perish by the sword.*"—(Matt. xxvi. 52.) We are mercifully informed that the "Lord God desireth not the death of a sinner, but rather that he should turn from his wickedness and live." To suppose otherwise, would be to imagine the great, beneficent, and adorable Deity a Hindoo idol, delighting in blood;—retribution would become the variable decree of fallible man—instead of the unerring fiat of an omnipresent, omniscient, and omnipotent Ruler of the whole universe: it would be to restore the law, and abrogate the gospel—to reject the precious sacrifice made for man—and to depose an ever-merciful Providence from His justice-seat. But I may not dwell here on this theme: and proceed with the record of facts. As stated at p. 75, transportation to New South Wales ceased in 1840, and the convicts then remaining in the colony have nearly all died off, or been emancipated: their number stood as noted below, on the 31st of December, 1852.† Since the gold discoveries there has been a marked diminution of great crimes in New South Wales.

There is no record of the number or condition of the aborigines within the colonial boundary. In 1850, the experiment was tried of enrolling them as a mounted police-force, under the command of British officers: it has been eminently successful; there is no want of recruits, and no "bounty" is needed: detachments of the corps are stationed in different parts of the colonies of New South Wales and Victoria, and are the terror of evil-doers, whether of the white or black race. The men are all young; average five feet nine inches in height—are light, agile, strong, quick at drill, good shots, and fearless horsemen. The uniform is a light-dragoon undress, and the pay 3*d.* a-day.‡ The efficiency of the native police is thus recognised in the *Burnett* district, neighbourhood of *Wide Bay*:—Before the arrival of this aboriginal force, murders were of

238 held tickets-of-leave: 35 were in gaol or hospitals; and the remainder were on roads or public works. The expense of colonial convicts was £17 to £19 each per annum.

‡ See Lt.-Colonel Munday's interesting *Sketches*.

frequent occurrence: men could not travel unless well-mounted and well-armed; hut-keepers could not go down to a creek for a bucket of water without a double-barrel gun; working-hands would not journey along a road unless in bands, with drays for protection; and sawyers and splitters could not fell a tree without looking behind at each blow, to see if a lurking savage was levelling a spear at them. Now, the district is as safe and peaceable as the most settled parts of the colony: men and boys are now shepherding without arms, and traversing the roads with blankets on their backs, as if walking through the streets of Sydney. Some stations, with 16,000 sheep, are shepherded by blacks; on others, the whole of the washing of the fleece is done by them: in one instance, 30,000 sheep were thus cleansed with the aid of a white overseer. Masters acknowledge that in shepherding, lambing-down, sheep-washing, and shearing, there is a saving of £150 to £250 per annum at their respective establishments, by the employment of the heretofore despised and persecuted aborigines.*

In June, 1852, Governor Fitzroy reported, that owing to the departure for the gold-fields of many of the Europeans engaged in pastoral pursuits, "the natives are employed in great numbers in tending sheep, hut-keeping, and wool-washing, in the more remote districts; but they appear to be too migratory in their habits to remain for any length of time in one employment. Except in the northern districts, where a few outrages have been committed, the aborigines are becoming harmless and peaceable; and the establishment of the native police corps is reported to have done much in maintaining order amongst them. There appears to be no difficulty in recruiting for this force, as the young men of the different tribes are found anxious to enlist."† The commissioners reported, from the *Maneroo* and *Lachlan* districts, that the aborigines were peaceable, employed in cutting wood for the settlers, getting in the harvest, and acting as stockmen, for which latter service they are well adapted, "being fond of riding, and remarkably quick in distinguishing stock belonging to their masters from those of other parties."

At the *Lower Darling*, it is recorded

* Abstracted from correspondence of *Sydney Morning Herald*, in 1853.

† Parl. Papers—*Gold Papers*, 28th February, 1853, p. 56.

that the natives are entrusted by the settlers with the entire transit of their wool on the Murray River‡ at *Euston*; and in their frail canoes, fashioned out of the bark of the *Yarra*, it is wonderful, that without damage or loss of any kind, how carefully bales of wool, stores, and supplies of every description, are floated over. In several districts the squatters would have had much difficulty in carrying on their pursuits without the aid of the aborigines, who are literally the hewers of wood and drawers of water in many of the provincial towns. But, in some places, there are still hostile feelings between the white and the coloured races—the latter spearing and destroying cattle, when practicable, and receiving, in retaliation, the murderous fire of their adversaries.

By kindness and fair dealing, the at one time ferocious savages of the *Darling Downs*' district have become perfectly peaceable and industrious. Three or four years ago, the tribes frequenting the *Macintyre River* were the most blood-thirsty in the district; yet now the European residents entrust all their sheep and stock to their charge; and some have not even a white man in their employ. In the *New England* district, several aborigines earn wages at the rate of £20 per annum; and the commissioner says, he "can speak confidently of the good conduct and orderly habits of the black servant, and kind conduct of the white master." The practice, which is increasing, of paying the natives wages in money, has had a beneficial effect in keeping them steady at their employment. Some, indeed, have been labouring at the gold-fields successfully, and were delighted with their acquisitions. Such are the people who have been hunted to death as if they were wolves, or destroyed as vermin by poisoned flour, and other deleterious substances, purposely left in their way. Until of late years, the murder of the aborigines, even in cold blood, involved no penal consequences; and white men, calling themselves Christians—and, in many instances, in the rank of gentlemen—boasted of the number of natives whom they had shot.

The intelligent author of one of the most truthful and interesting works published on New South Wales,§ gives a fearful picture of the treatment of the miserable natives,

‡ If steam navigation be established along the Murray river for fifteen hundred miles, the services of the aborigines will be very valuable.

§ *Settlers and Convicts*: London, 1852.

and furnishes the details of one celebrated instance, in 1839, where some stockmen seized, by surprise, a whole tribe, and deliberately massacred them all—men, women, and children.* Seven perpetrators of this diabolical deed were arrested by some magistrates in the Hunter River district; sent down to Sydney; tried twice, sentenced to death and executed, despite a protest of eleven of the jurymen on the first trial, and a recommendation to mercy, signed by ten of the jury, on the second trial. This meting out of even-handed justice, almost for the first time, between white and black men, taught the former a severe lesson, and, it is to be hoped, checked at least wholesale slaughter.

When a hostile recrimination has commenced between two races, far removed from each other in the scale of civilisation, it is easy to foresee how fatal must be the issue to the weaker party. Nearly similar results have ensued in Australia to those which I have described in my South African volume, as attendant on the contests between the Dutch settlers and the bushmen and Hottentots; the main difference being, that the British did not, like the Dutch Boors, form commandoes, under the sanction of their government, for the slaughter of the people whose country they had both unlawfully occupied. A more humane spirit now

prevails in Australia; and, it is to be hoped, that the existing remnant of a once numerous people may be saved from extirpation. Unfortunately, like all savage races, there is an ardent desire among them for intoxicating beverages, when the nauseating taste at first experienced is overcome. Then the "fire-water" is sought at all hazards, and wide-spread, irretrievable ruin, is the result. Self-interest, as well as higher motives, will, I trust, induce the settlers to prohibit, as far as practicable, the supply of spirits to the aborigines, who know no moderation when the taste is implanted, and for whom—as, indeed, for many of their white brethren—the only safety consists in total abstinence.

Commerce.—The maritime trade of New South Wales, down to 1848, has been given at p. 187: but most of the returns, up to that date, included the district of Port Phillip—now Victoria. The imports of New South Wales alone, are now prepared separately, and will be found in the *Appendix*, arranged in a tabular form since 1837. In order to show the effect of the gold-discovery, details of the following three years are given, comprising twelve months before, and the same period after, that event.

Value of imports into, and exports from, New South Wales—

Imports.

Years.	Great Britain	British Colonies.		South Sea Islands.	Fisheries.	United States of America.	Foreign States.	Total.
		New Zealand.	Elsewhere.					
1850	1,070,511	12,385	61,210	31,827	11,052	8,143	138,285	1,333,413
1851	1,152,421	15,609	174,250	6,771	23,033	14,127	177,720	1,563,931
1852	1,395,091	40,124	134,862	4,501	25,770	29,690	270,398	1,900,436

Exports.

Years.	Great Britain.	British Colonies.		South Sea Islands.	Fisheries.	United States of America.	Foreign States.	Total.
		New Zealand.	Elsewhere.					
1850	1,038,340	96,003	97,359	17,537	None	95,473	13,072	1,357,784
1851	1,477,452	94,046	146,805	15,334		33,784	29,491	1,796,912
1852	3,607,269	74,759	904,271	6,271		5,081	6,383	4,604,034

The large augmentation of exports in 1852, was caused by the amount of gold shipped—

* See record of trial at Sydney, in *Settlers and Convicts*; by an emigrant mechanic: pp. 388 to 396.

viz., 818,751 oz., valued at £2,660,946 sterling. Details of the chief items of export, since 1837, are given in the *Appendix*.

Among the imports during 1852, there

steam-mills for dressing grain. Among the manufactories, there were two distilleries, one rectifying establishment, 11 breweries, two sugar-refining establishments, 16 soap-factories, nine tobacco-factories, seven woollen cloth-factories, one hat-factory, four rope-walks, 64 tanneries, one salt-factory, five salting and meat-preserving establishments, four potteries, one gas "works," 12 iron and brass-founderies, and one smelting-furnace. The tendency is towards the increase of these establishments; and abundance of capital will assist enterprising individuals. The "tweeds" and "Parramatta cloth" are excellent for wear. Some of the articles manufactured have thus augmented since 1837—

Articles.	1847.	1852.
Soap cwt.	19,925	26,042
Refined sugar "	39,600	83,100
Tobacco "	1,321	6,564
Woollen cloths yds.	174,088	234,378
Blankets No.	424	326*

See Appendix.

Among the products of colonial industry in 1852, the value may be thus noted—wool, £676,815; tallow, £146,811; hides and leather, £37,661; salted and preserved-meats, £17,638; live-stock (by sea),

£16,500; timber, £17,330; oil and whale-bone, £34,562: total, £947,317.†

Tallow will become a large colonial product; between 1844 and 1851 (inclusive), there was furnished upwards of 25,700 tons of this valuable article: it is to be hoped, that ere long we shall be quite independent of Russian tallow: should horses multiply, as in South America, they also will furnish a large yield.

Coals now form a lucrative article of colonial traffic. In 1836, the *Newcastle* coal-mines (see p. 194) yielded only 12,646 tons; in 1849, tons, 33,390; in 1850, tons, 45,084; in 1851, tons, 45,642: official value, in 1851, £17,804—7s. 6d. per ton.

From other places, also, within the colony, coal raised as follows:— In 1849, tons, 15,126; in 1850, tons, 26,132; in 1851, tons, 22,018: official value, in 1851, £7,652, or 7s. per ton.—[See p. 194 for previous return.]

The abundant coal-fields of New South Wales are among her richest treasures, and the mineral will become an annually-increasing export, as steam-navigation extends over the Southern Pacific—an ocean specially adapted for this system of intercourse.

The state of the post-office in the colony indicates the commercial and general position of the people—

Years.	No. of Post-Offices.	Letters Transmitted	Newspapers.	Miles of Private Roads traversed.	Income.	Expenditure.
					£	£
1840	53	619,748	920,078	380,353	13,413	17,276
1845	67	540,936	833,512	412,438	14,165	12,309
1849	88	609,021	734,985	586,678	15,462	13,615
1850†	96	842,309	604,488	686,614	13,946	16,732
1851	101	975,318	762,487	751,154	18,252	16,324
1852	131	1,117,777	1,023,678	—	18,174	25,304

Finances.—Details of the revenue and expenditure are given, for a series of years, at pp. 220–3. The following returns, for three years, show that the colonists now defray all their own civil charges; and it is proposed that they shall contribute also, to

a considerable extent, towards the payment of their military defence. §

The taxation, per head, is about fifty shillings annually, which is larger than that levied from the inhabitants of the United Kingdom.

from the ports of London, Liverpool, and Glasgow, for Sydney and Port Phillip, in 1839, was—number, 114; tons, 52,412.

* For 1851.—No return for 1852.

† Cotton wool is likely to become an important article of export: five acres of gravelly ridge land yielded, in 1853, 2,500 lbs. of cotton, although half the yield had been destroyed by frost before the crop could be gathered. The clear profit was £37 18s. 4d.

‡ An uniform and cheap postage act came into operation part of this year.

§ The actual expenditure incurred by Great Britain, for military protection to New South Wales and Victoria, during the year ending 31st March, 1852, was £31,590: since then the colonists have undertaken the payment of the additional troops sent from England. A very excellent and extensive cantonment, termed the *Victoria Barracks*, has been constructed at Sydney, with military garden, cricket-ground, &c: they will contain, with much comfort, four field-officers, 36 officers, and 646 rank and file.

Items of revenue for the years—

General.	1850.	1851.	1852.
	£	£	£
Custom duties . . .	142,819	153,540	217,021
Colonial spirits . . .	2,550	7,210	18,211
Gold fund . . .	—	30,890	55,764
Conveyance of gold . . .	—	2,919	6,542
Land sales . . .	11,733	21,369	11,740
Rents, exclusive of land	4,363	3,517	5,184
Licenses . . .	29,563	30,083	33,751
Postages . . .	13,646	18,252	18,174
Fines and forfeitures . . .	2,549	3,334	5,338
Fees of office . . .	10,752	8,327	8,465
Sale of government property	465	3,615	3,636
Reimbursement in aid of expenses	2,194	2,203	28,197
Miscellaneous receipts	761	1,334	1,729
Pilotage . . .	—	2,299	2,519
Port & harbour dues	5,542	3,824	3,202
Assessment on stock beyond settled districts	16,715	16,477	16,101
Auction duty . . .	3,583	2,337	2,811
Totals	247,573	311,538	433,391

The proceeds of the sale of crown-land, in N. S. Wales, separate from Victoria, have been, from 1837 to 1852 (inclusive), thus:—£116,474; £79,130; £92,968; £97,498; £19,235; £11,844; £5,311; £6,745; £11,563; £11,249; £9,929; £7,624; £20,113; £33,757; £64,425; £55,808. The foregoing shows how the Wakefield system of high, or “sufficient price,” brought the sale so low as £9,929, in 1847. The discovery of gold has enabled the colonists to resume the purchase of what every Englishman covets, and thus a mischievous theory may, in time, be neutralised. In order to enable the colonists to provide funds for immigration, which the land-sales failed to supply, money was borrowed on debentures to a considerable amount; and, on the 31st of December, 1851, there were still outstanding and unpaid, £187,100, now in course of liquidation. The details of expenditure are thus shown for three years:—

Crown revenue.	1850.	1851.	1852.
	£	£	£
<i>Territorial—</i>			
Land sales . . .	21,674	42,234	41,272
Land and immigration deposits	350	821	2,795
Leases and licenses to occupy crown lands	34,753	36,806	36,928
Licenses to cut timber	473	1,179	489
Quit-rents and redemption . . .	6,209	7,667	3,468
Government quarries	196	42	25
Reimbursements of sales	352	778	5,616
	64,008	89,531	90,595
<i>Special Credits—</i>			
Sale of land and immigration debentures . . .	57,917	80,541	144,176
Immigration remittances . . .	339	626	3,731
	—	81,167	147,907
Church and school estates' fund . . .	4,832	4,460	5,242
Gen. Totals . . .	374,669	486,698	682,137

Departments.	1850.	1851.	1852.
	£	£	£
Civil establishment	62,573	63,786	85,799
Judicial ditto	26,723	27,323	27,142
Police	42,386	52,032	64,494
Gaols, &c.	11,972	12,527	17,065
Medical establishment	4,220	5,038	5,742
Ecclesiastical ditto	27,879	45,647	38,152
Orphan school establishment	2,710	3,541	3,745
Pension and retired allowances	1,935	2,334	3,597
Charitable allowances	4,314	5,659	8,315
Grants in aid of public institutions	500	5,800	5,600
Education	13,137	17,897	15,369
Public works	16,067	14,117	18,366
Roads, streets, and bridges	6,356	6,741	15,705
	220,772	262,447	309,096
Drawbacks and refunds	2,250	2,272	11,295
Revenue and receipts returned	9,700	3,223	3,434
Miscellaneous disbursements	7,732	10,460	10,028
Remittance to colonial agent	—	18,233	12,108
Survey, sale, and management of crown lands	31,357	32,026	33,689
Immigration	89,675	98,721	158,097
Aborigines	771	163	353
Miscellaneous services	3,691	3,488	4,738
Rent. to colonial agent-general	—	2,964	17,688
Revenue and receipts returned	270	409	440
Expenses consequent on gold discoveries	—	9,299	38,927
Management of church and school estates	3,608	399	424
Total disbursements*	369,841	444,108	600,322

The general revenue for the year 1853-'4 is estimated at £566,225, notwithstanding the abolition of port and harbour, auction duties, and assessment on stock; but it is painful to observe, that among the items a sum of £188,000 is put down for imported spirits: the whole duty anticipated from foreign and colonial spirits, beer and wine, is £250,000. The amount of the territorial revenue will depend on the quantity of land sold—it will probably exceed £100,000: so that the colonial legislature will have at its entire disposal a sum of upwards of six hundred thousand pounds sterling.

The number and value of land mortgages demonstrates that the proprietors are now in a sound state. It would be well if England, Scotland, or Ireland could present as sound a state of private money-arrange-

* The allowances to troops from colonial revenue, in 1852, was £1,362. The expenses by England, for military protection, was £30,578; the number of troops being 684 men and officers of all grades.

ments as New South Wales now does, after a severe crisis in the years 1840-'3.

Years.	Mortgages.	
	No.	Amount of Mortgages.
1837	286	£ 231,044
1838	256	248,891
1839	383	348,818
1840	459	514,741
1841	709	1,098,741
1842	625	824,412
1843	582	1,055,580
1844	494	299,818
1845	318	272,282
1846	308	170,374
1847	320	180,544
1848	307	202,646
1849	376	198,497
1850	310	142,022
1851	359	144,402
1852	330	180,068

The liens on the wool of sheep, and the loans on live stock, which were legally authorised and registered in 1843, now exhibit a healthy condition of affairs:—

Years.	Wool.			Live Stock.	
	No. of Liens.	No. of Sheep.	Money Lent.	No. of Mortgages.	Money Lent.
			£		£
1843	54	318,739	30,664	96	178,567
1844	139	837,997	57,733	226	241,727
1845	125	657,989	55,865	152	132,352
1846	149	813,951	71,351	146	150,733
1847	199	1,095,402	107,477	168	137,856
1848	240	1,378,180	108,922	205	219,756
1849	211	1,154,468	84,692	213	161,533
1850	187	1,148,344	82,731	163	118,987
1851	192	1,069,981	85,110	158	193,126
1852	69	917,170	79,610	101	129,958

Coin and Bullion in the Colony on 31st December, 1852—in the Banks.*

Banks.	British Coin.	Bullion.	Total.	Deposits.	Notes in Circulation.	Bills, &c., Discounted
	£	£	£	£	£	£
New South Wales . . .	105,512	108,230	213,743	1,236,987	120,036	563,766†
Commercial	160,859	163,429	324,288	441,723	149,412	338,957
Australasian	184,070	264,328	448,398	447,508	222,073	291,452
Union of Australia . .	242,473	179,647	422,120	470,199	252,238	387,155
Totals	692,914	715,634	1,408,549	2,596,417	743,759	1,581,330

There is no coin now retained in the colonial treasury, and but a small sum in the military or commissariat chest. The value of the coin and bullion in the banks, in 1852, is thrice the amount of that in the colonial treasury, military chest, and banks, during the average of seven years, ending with 1843. In 1851, the money so placed was only £540,766 (see *Appendix*).

Monetary State.—New South Wales has passed through a monetary crisis on several occasions, owing partly to mistaken measures of government, and partly to those habits of speculation which characterise the Anglo-Saxon race. That the state of the colonists is now sound, is evidenced by the following comparative review of their banking proceedings at two periods:—

State.	1840.	1852.	Decrease or Increase.
Population, about . . .	130,000	210,000	— £ D. 637,300 = 40 per cent.
Discounts	£ 2,218,600	£ 1,581,300	—
Discounts per head, about	£17	£7.5	—
Coin and bullion in banks	437,500	1,428,900	{ In. 991,400, abt. 230 per cent.
Proportion to population, per head	3	7	In. 4l.
<i>Liabilities of banks</i> —			
Coin required	—	487,200	1,158,300
Coin held	—	437,500	1,423,000
Deficiency	—	49,700	—
Excess	—	—	270,000

It remains to be seen whether the abundant production of gold, and a plethora of money, may not cause another period of excitement. Several new banks have, since the gold-discoveries, been established or commenced in Australia and in London, to operate in Australasia, in connection with branches in England and in India; they will require prudential management to avoid loss. The financial state of the well-established banking institutions is remarkable: their coin and bullion is *twice*, and their deposits *thrice*, the amount of their paper issues.

Government.—Since the first division of this work was issued, in 1850, the imperial parliament passed an act (13th and 14th Vic., cap. 59, dated 5th of August, 1850)—see *Appendix*—for the better government of the Australian colonies. In previous pages (214-17), the opinions I then and still enter-

* *Sydney Morning Herald*, 16th March, 1853.

† Quarter ending 31st December.

tain, are fully expressed; and the prediction that the act would not be acceptable in New South Wales, and would lead to political excitement, has been unhappily verified. Indeed, but for the discovery of gold, which absorbed public attention, internecine strife might have caused serious mischief: as it is, agitation, and the propagating of extreme opinions, have tended materially to weaken the ties of connexion with the parent state.

The new act (as stated in p. 211) provided for the separation of the district called Port Phillip from New South Wales, and its erection into a separate colony, under the designation of Victoria. After the separation, the Legislative Assembly was to consist of such a number of members as the governor and council might determine; two-thirds of the members to be elected by the colonists, and one-third to be nominated by the crown. The franchise fixed was a freehold estate of £100, clear value; or the occupation of a dwelling-house, for six months, of the clear value of £10, or a license to depasture; or a leasehold estate of £10 value; and the usual provisions of age (21 years), natural-born, or naturalised, and not attainted of treason or felony. The qualification to be free of all incumbrances; a lease to have not less than three years to run; and all rates and taxes due to within three months of election or registration to be paid. The governor and council to establish, and alter if necessary, the electoral districts, and to increase the number of elected members, provided the Crown appoint a corresponding proportion of one-third new members.

The governor and Legislative Assembly, thus constituted, were authorised to make laws for the colony, provided they were not repugnant to those of England; and to appropriate the whole of the revenues, *except those arising from land*, with which the *local government was not to interfere*. Out of the annual revenues, the following sums were to be primarily provided:—Governor, £5,000; chief justice, £2,000; two puisne judges, £3,000; attorney and solicitor-general, crown solicitor, and expenses of administration of justice, £19,000; colonial secretary and his department, £6,500; colonial treasurer and ditto, £4,000; auditor-general and ditto, £3,000; clerk and expenses of executive council, £500; public worship, £28,000; pensions, £2,500 = £53,500. These sums might hereafter be altered, with the consent of the Crown. The costs and charges for the collection and management

of the customs' revenue to be subject to the regulations of the Treasury Board in London. No differential duties to be levied in favour of England, or of any other country: all goods to be treated alike.

The act was to be brought into operation within six weeks after its receipt in the colony; but the Legislative Assembly and governor, with the consent of the Crown, had power to alter its provisions as to the election and qualification of electors and members; or to establish, instead of the Legislative Assembly above described, a council and a house of representatives, or other legislative houses; and to vest in the same the powers now confided to the local government. Sir Charles Fitz-Roy was raised from the position of governor of New South Wales, to that of governor-general over all the Australian colonies; and in virtue of the powers confided to him, and with the assistance of Mr. E. Deas Thompson, the colonial secretary, New South Wales was divided into 13 county districts, to return, on the basis of population and property, 14; eight pastoral districts to return eight; and 10 urban districts to return 10—members (= 32) for the new Legislative Assembly, to be summoned in 1850.

When this enactment, passed by the Imperial Parliament, reached New South Wales, the existing Legislative Council, previous to its dissolution, remonstrated strongly against the procedure; recorded their "deep disappointment and dissatisfaction at the constitution conferred by that act on this colony;" and added their reasons in the following explicit statement:—

"After the reiterated reports, resolutions, addresses, and petitions which have proceeded from us during the whole course of our legislative career, against the schedules appended to the 5 and 6 Vict., c. 76, and the appropriations of our ordinary revenue under the sole authority of parliament—against the administration of our waste lands and our territorial revenue thence arising—against the withholding of the customs' department from our control—against the dispensation of the patronage of the colony at dictation of the minister for the colonies—and against the vote reserved and exercised by the same minister, in the name of the Crown, in matters of local legislation—we feel that we had a right to expect that these undoubted grievances would have been redressed by the 13 and 14 Vict., cap. 59, or that power to redress them would have been conferred on the constituent bodies thereby created, with the avowed intention of establishing an authority more competent than parliament itself, to frame suitable constitutions for the whole group of the Australian colonies. These our reasonable expectations have been utterly frustrated. The schedules, instead of being abolished, have been increased. The powers

of altering the appropriations in these schedules, conferred on the colonial legislature by this new act, limited as these powers are, have been in effect nullified by the subsequent instructions of the colonial minister. The exploded fallacies of the Wakefield theory are still clung to; the pernicious Land Sales' Act (5 and 6 Vict., c. 36) is still enforced, and thousands of our fellow-subjects (in consequence of the undue price put by that mischievous and impolitic enactment upon our waste lands, in defiance of the precedents of the United States, of Canada, and the other North American colonies, and even of the neighbouring colony of the Cape of Good Hope) are annually diverted from our shores, and thus forced, against their will, to seek a home for themselves and their children in the backwoods of America. Nor is this all. Our territorial revenue, diminished as it is by this most mistaken policy, is in a great measure confined to the introduction among us of people unsuited to our wants, and in many instances the outpourings of the poorhouses and unions of the United Kingdom, instead of being applied in directing to this colony a stream of vigorous and efficient labour, calculated to elevate the character of our industrial population. The bestowal of office among us, with but partial exception, is still exercised by or at the nomination of the colonial minister, and without any reference to the just claims of the colonists, as if the colony itself were but the fief of that minister. The salaries of the officers of the customs, and all other departments of government included in the schedules, are placed beyond our control; and the only result of this new enactment, introduced into parliament by the prime minister himself, with the declared intention of conferring upon us enlarged powers of self-government, and treating us at last as an integral portion of the empire, is, that all the material powers exercised for centuries by the House of Commons, are still withheld from us; that our loyalty, and desire for the maintenance of order and good government, are so far distrusted, that we are not permitted to vote our own civil list, lest it might prove inadequate to the requirements of the public service; that our waste lands and our territorial revenue, for which her Majesty is but a trustee, instead of being spontaneously surrendered, as the equivalent for such civil list, is still reserved, to the great detriment of all classes of her Majesty's subjects, in order to swell the patronage and power of the ministers of the Crown; that whilst, in defiance of the Declaratory Act (18 George III., cap. 12, sect. 1), which has hitherto been considered the Magna Charta of the representative rights of all the British plantations, a large amount of our public revenue is thus levied and appropriated by the authority of parliament, we have not even the consolation of seeing that portion of it which is applied to the payment of the salaries of our public officers distributed as it ought to be among the settled inhabitants; and that, as a fit climax to this system of misrule, we are not allowed to exercise the most ordinary legislation which is not subject to the veto of the colonial minister.

"Thus circumstanced, we feel that, on the eve of the dissolution of this council, and as the closing act of our legislative existence, no other course is open to us but to enter on our own journals our declaration, protest, and remonstrance, as well against the act of parliament itself (13 and 14 Vict., cap. 59) as against the instructions of the minister, by which the small power of retrenchment that act confers on the colonial legislature has been thus overridden, and

to bequeath the redress of the grievances which we have been unable to effect by constitutional means to the Legislative Council by which we are about to be succeeded.

"We, the Legislative Council of New South Wales, do accordingly hereby solemnly protest, insist, and declare as follows:—

"1st. That the imperial parliament has not, nor of right ought to have, any power to tax the people of this colony, or to appropriate any of the moneys levied by authority of the colonial legislature; that this power can only be lawfully exercised by the colonial legislature; and that the Imperial Parliament has solemnly disclaimed this power by 18 Geo. III., cap. 12, sect. 1, which act remains unrepealed.

"2nd. That the revenue arising from the public lands, derived as it is 'mainly' from the value imparted to them by the labour and capital of the people of this colony, is as much their property as the ordinary revenue, and ought, therefore, to be subject only to the like control and appropriation.

"3rd. That the customs and all other departments should be subject to the direct supervision and control of the colonial legislature, which should have the appropriation of the gross revenues of the colony, from whatever source arising, and, as a necessary incident to this authority, the regulation of the salaries of all colonial officers.

"4th. That offices of trust and emolument should be conferred only on the settled inhabitants, the office of governor alone excepted; that this officer should be appointed and paid by the Crown; and that the whole patronage of the colony should be vested in him and the executive council, unfettered by instructions from the minister for the colonies.

"5th. That plenary powers of legislation should be conferred upon and exercised by the colonial legislature for the time being, and that no bills should be reserved for the signification of her Majesty's pleasure, unless they effect the prerogatives of the Crown, or the general interests of the empire.

"Solemnly protesting against these wrongs, and declaring and insisting upon these our undoubted rights, we leave the redress of the one and the assertion of the other to the people whom we represent, and the legislature which shall follow us.

"(Signed) CHARLES NICHOLSON, Speaker.

"Legislative Council-Chamber, Sydney,

"May 1, 1851."

Earl Grey, in a despatch dated 23rd of January, 1852, replied, at considerable length, to the objections of the council. The arguments of his lordship are clearly set forth, and temperately urged: he says—the primary object of the act was the separation of Port Phillip from New South Wales, and to accommodate the existing constitution to that separation; and that there was but one fundamental change, which gave to the legislature the power of "amending and altering (subject to certain conditions), almost to the fullest extent, their own institutions." Earl Grey then commented *seriatim* on the protest;—the views of his lordship, which deserve to be read *in extenso*, may be thus briefly noted:—

1st. *Schedules of expenditure*—essential for the protection of existing interests.

2nd. *Waste lands*—are not the exclusive property of the inhabitants of New South Wales; and their representatives ought not to have, as a right, the control and disposal of the revenue arising therefrom. When, and on what condition, it may be desirable to transfer the control of the waste lands of a colony to its local legislature, is a question of expediency and not of right—of expediency respectively both to the local community and to the people of the empire at large, whose claims require joint consideration of mutual adjustment; as the present value of those waste lands has been mainly given through the expenditure incurred by this country in founding, maintaining, and defending the several settlements.*

3rd. *Emigration* system defended, on the ground that, amidst the great multitude of people sent out to the colony, the proportion of persons of whom there has been any serious complaint, is very small, and that there have been testimonials of a gratifying nature as to the character of the emigrants selected.

4th. *Gross, instead of net revenue, derived from custom duties, to be placed at disposal of local legislature.*—Colony, in this matter, is exactly on the same footing with the Imperial Parliament.†

5th. *Official appointments.*—No monopoly can be recognised, on the part of the inhabitants of New South Wales, to such situations, so as to preclude them from being bestowed on others of her majesty's subjects; but, for several years past, public employments in Australia have, with scarcely an exception, been filled by persons in the colony, selected by the governor, and approved by the Crown.

6th. *Plenary powers.*—The control over the acts of the local legislature, retained and exercised by the Crown from the earliest period of colonial history, could not be abandoned without endangering the connexion between the mother country and her colonies.

More than 200 acts, passed by the New South Wales legislature, have received the royal confirmation; seven have been disallowed; and about the same number re-

turned to the colony for the insertion of amendments: of the trifling number thus interfered with, nearly all were passed during the early sittings of the legislature, when the members were inexperienced. Earl Grey concludes his despatch, in the thirtieth paragraph, with the following well-expressed and noble-minded sentiments, which will not bear abstracting or abbreviating:—

"30. I have thus explained to you the views of her majesty's government on all the principal heads of the declaration of the late Legislative Council; and I trust that, however this explanation may be received by those who, as members of that body, adopted the declaration, their constituents will be more disposed to weigh the considerations here advanced, and to endeavour, to the best of their power, to mitigate the opposition of opinions, and conciliate jarring interests, than to adopt, without demur, the sweeping conclusions which that declaration advocates.

"At all events, I feel certain that, on reflection, they will acquit her majesty's government of any intention to inflict on them a system of misrule and oppression. We have had the interests of the local community and of the empire (which, rightly considered, are the same) solely in view; and to attribute to us other motives, would be as unjust as it would be on my part to impute the language of this declaration, because I do not agree in it, to a spirit of faction or resentment. Whatever may be the censure in which the late council may have thought fit to have indulged towards myself, I cannot be guilty of such injustice towards them. Amidst the deep satisfaction with which I have watched, of late years, the extraordinary progress of New South Wales in nearly all that constitutes the social and material welfare of a community, I have never ceased to appreciate the manner in which its legislature has contributed to that advance by the zealous and constant discharge of its duty to its constituents; and it is my sincere hope that the now separate legislatures, using with their best abilities the powers which the act now under discussion has conferred on them, will follow in that career of improvement which their predecessors have marked out for them.

"I have, &c.,

"(Signed) GREY.

"Governor Sir C. A. Fitz-Roy,

"&c. &c."

It cannot, however, be denied, that the spirit engendered in New South Wales has been owing to the maladministration, in past years, of its affairs by the home government. Persons have been sent out to fill important situations in the colony, who were, in every respect, disqualified; and remonstrances on the subject were unheeded. This pernicious system has been abandoned, but the rankling which it occasioned has remained. Then, again, the fixing 20s. per acre as the minimum price of waste lands, caused (as previously shown, p. 491) a diminution of the land revenue, a check to emigration, and the rise of the squatting system,

* The reader will find, in a note at p. 210, similar opinions given by the author in 1850.

† It is now proposed to cause the whole of the gross custom revenue in the United Kingdom to be paid, without deduction, into the exchequer.

or monopoly of land by a few individuals: it is not, therefore, surprising that the colonists, finding no attention paid to their earnest entreaties for a reduction in the minimum upset price of land, struggled for the obtaining of complete control over the unoccupied wastes in New South Wales.*

The plan for carrying out constitutional government in Australia is still (March, 1854) unsettled: in New South Wales the Legislative Council has proposed the formation of two chambers (as recommended in 1850, at p. 216), one nominated by the Crown, and the other elected by the colonists; and a numerous and influential portion of the present representatives of the people suggest the creation of a titled hereditary aristocracy. In Victoria, the council advise two chambers, both elective; in South Australia, two chambers, one elective and the other nominative, with certain qualifying conditions. Much discussion has also taken place as to colonial and imperial legislation—the boundary to be drawn between merely local enactments and those which concern the weal of the empire.

The clause in the report of the committee of the Legislative Council, appointed to prepare a draft of the new constitution, which refers to the conferring by the Crown of hereditary titles in the colonies, and has been objected to by some colonists, is founded on an act of the Imperial Parliament (3 Geo. III. c. 31), proposed by Mr. Pitt, "for making more effectual government for the province of Quebec:—"

"That act (says the report of the Legislative Council of New South Wales) authorises the Crown, whenever it thinks proper to confer any hereditary title or honour, rank or dignity, to annex thereto an hereditary right of being summoned to the Legislative Council. Your committee are not prepared to recommend the introduction into this colony of a right by descent to a seat in the upper house, but are of opinion that the creation of hereditary titles (leaving it to the option of the Crown to annex to the title of the first patentee a seat for life in such house, and conferring on the original patentees and their descendants, inheritors of their titles, a power to elect a certain number of their order, to form, in conjunction with the original patentees then living, the upper house of parliament) would be a great improvement upon any form of Legislative Council

* I have to acknowledge, with grateful thanks, to the governor-general of Australia, sir Charles Fitz-Roy, the recent receipt of the whole of the legislative records of New South Wales, up to 1852 inclusive, comprised in 26 large volumes, handsomely bound; and which the lords of the treasury have been pleased to order the commissioners of customs to pass free of duty. In the present work, which is necessarily restricted in size, it has not been possible to take

hitherto tried or recommended in any British colony. They conceive that an upper house, framed on this principle, whilst it would be free from the objections which have been urged against the House of Lords, on the ground of the hereditary right of legislation which they exercise, would lay the foundation of an aristocracy which, from their fortune, birth, leisure, and the superior education these advantages would superinduce, would soon supply elements for the formation of an upper house, modelled, as far as circumstances will admit, upon the analogies of the British constitution. Such a house would be a close imitation of the elective portion of the House of Lords which is supplied from the Irish and Scotch peerage; nor is it the least of the advantages which would arise from the creation of a titled order, that it would necessarily form one of the strongest inducements not only to respectable families to remain in this colony, but to the upper classes of the United Kingdom and other countries, who are desirous to emigrate, to choose it for their future abode."

The large majority of the council who have approved of this clause, say, they "desire to have a form of government based on the analogies of the British constitution, and have no wish to sow the seeds of a future democracy." A large extension of the elective franchise is proposed—in fact, closely approximating to universal suffrage—a liberal civil list is offered to the crown, and "*responsible government*" to the people.

It appears to me, that the parliament of the United Kingdom is the fitting tribunal for the settlement of the constitutions of the Australian colonies; and the materials for such legislation now exist, each province having had frequent opportunities for discussion, by which the wishes of the people have been made known.

That a wisdom superior to mere worldly policy may guide the councils of the state in laying the foundations of the government of a great nation in the Southern Pacific, must be the earnest prayer of all who desire the peace, happiness, and prosperity of their fellow-beings of every creed, colour, and clime.

VICTORIA, FORMERLY PORT PHILLIP.

No community of which we have any record, presents such an extraordinary rise and progress as is exhibited in the statistics of this fine region, which was originally

advantage of these treasuries of facts; but, if life and health be spared, I may hope, at some not distant day, to prepare, with the concurrence and support of the local legislature, a full and impartial chronological record of New South Wales, in whose prosperity I have ever felt a warm interest, and whose loyal inhabitants I have, since my first *History of the Colonies*, in 1834, endeavoured to defend from calumny and misrepresentation in England.

styled by one of the early explorers (Sir T. L. Mitchell), *Australia Felix*. Its prosperity was, in the first instance, owing to a fertile soil, and the contiguity of the older and flourishing settlements of New South Wales and Van Diemen's Land, whose flocks and herds, seeking new pastures, found here abundant food and a congenial climate. These substantial attractions drew together a large population, who, on the discovery of gold, towards the close of the year 1851, were enabled to avail themselves of the auriferous riches beneath their feet, and to furnish sustenance (mutton and beef), at a cheap rate, to thou-

sands who flocked thither from every quarter of the globe. The chronological history of the colony—its physical features, geology, climate, population, products, and general statistics, so far as they could be separated from those of New South Wales, of which Victoria was, until July, 1851, a dependency, have been given up to 1848 in previous pages (pp. 268-290): it now only remains to state briefly the present and comparative condition of the settlement. In the short space of eighteen years we see the following results, which must be considered extraordinary, independently of the gold-discoveries:

Revenue and Expenditure, Trade and Population of Victoria, since 1836.

Years.	General Revenue.	Land and Crown Revenue.	Total Revenue.	Expenditure.	Imports †	Exports.	Total of External Trade.	Population Average of Year.
	£	£	£	£	£	£	£	
1836	None	None	None	2,164	No returns.	No returns.	No returns.	1,200
1837	2,358	3,712	6,070	5,872	109,000	12,000	121,000	3,000
1838	2,245	37,774	40,019	16,874	71,000	21,000	92,000	5,000
1839	14,008	60,689	74,697	35,848	205,000	78,000	283,000	7,000
1840	29,238	226,745	255,983	70,128	392,000	155,000	547,000	10,000
1841	73,065	79,759	152,824	201,363	335,000	139,000	474,000	14,000
1842	75,372	11,924	87,296	124,630	264,000	204,000	468,000	19,000
1843	61,792	11,772	73,564	57,165	183,000	278,000	461,000	22,000
1844	58,648	11,264	69,912	63,048	151,000	257,000	408,000	24,000
1845	66,001	32,537	98,538	43,241	248,000	464,000	712,000	28,000
1846	60,332	36,013	96,345	51,094	316,000	425,000	741,000	34,000
1847	68,142	70,150	138,293	73,460	438,000	669,000	1,107,000	42,000
1848	86,153	58,607	144,760	140,259	374,000	675,000	1,049,000	50,000
1849	104,718	102,080	206,798	154,949	480,000	755,000	1,235,000	60,000
1850	124,469	136,852	261,321	197,323	745,000	1,042,000	1,787,000	70,000
1851	180,004*	199,820	379,824	—	1,056,437	1,423,909	2,480,346	82,000
1852	846,214†	730,966	1,577,181	734,961	4,069,742	7,451,549	11,521,291	150,000
1853	—	—	3,200,000	3,000,000	15,000,000	9,000,000	24,000,000	240,000

The shipping increase is thus shown—

Years.	Ships.	Tons.
1837	—	13,000
1851	669	126,411
1852	1,656	408,216

Population.—Details of the census in 1846 are given at pp. 269-70. In March, 1851, another enumeration was taken, and showed that there were then 46,202 males and 31,143 females = 77,345 inhabitants (see *Appendix*). The greater number of these were adults; viz.—

Years of Age.	Males.	Females.	Total.
Under Seven	9,619	9,318	18,937
Seven and under Fourteen	4,636	4,374	9,010
Fourteen & under Twenty-one	3,712	3,576	7,288
Twenty-one & under Forty-five	24,666	12,273	36,939
Forty-five and upwards	4,019	1,602	5,621

Of the above 77,345, there were born in the colony, or arrived free from other

countries, 43,006 males, 30,784 females = 73,790. Of the remaining population, 3,053 males and 356 females = 3,409, were formerly prisoners, but had now become free by fulfilling their period of servitude, or by pardon. The number of convicts was 144 males and 2 females = 146, of whom 65 held "tickets-of-leave;" two were assigned as servants to private individuals; and 79 were in the employment of government.

Probably, by this time, there is not an English convict remaining in the colony; but how many runaways there may be from the prisoners of Van Diemen's Land, it would be difficult to discover.

The nations to which the population belonged, in March, 1851, were—England,

* Including £24,404 of gold revenue.

† Including £438,845 of gold revenue.

‡ Until the separation of New South Wales from Victoria, 1st of July, 1851, it was not always possible to discriminate the trade properly belonging to each settlement; the earlier years are, therefore (in the opinion of Mr. Westgarth, to whom I am indebted for some of the details), somewhat shorn of their due proportions.

28,968; Ireland, 14,618; Scotland, 8,053; Wales, 377; other British dominions, 3,425; foreign countries, 1,494: born in the colony, 20,470—viz., males, 10,452; females, 10,018. The women from the United Kingdom were in number, 19,125: nearly one-half (9,171) were from England; 6,904 from Ireland; 2,919 from Scotland; and 131 from Wales. Of the entire population, 12,529 males and 12,498 females are returned as married: 52,318, of both sexes, are described as single; but it must be remembered that 35,235 of the inhabitants were under 21 years of age. The division of occupation will be seen in the *Appendix*: it may be observed, that the domestics were—females, 3,198; males, 1,412 = 4,610, or one servant to every 16½ persons: the paupers and pensioners were only 146, or one to every 536—a great contrast to the state of pauperism in England, where, in 1854, one in every 20 inhabitants, *legally* receives alms; those supported by pensions, in public institutions and by private individuals throughout the kingdom, are not ascertainable. The number of houses was 10,935, or seven inmates to each. Of the habitations, 4,864 were built of brick or stone, and 6,128 were constructed of wood.

The two principal towns stood thus in 1846, and in March, 1851:—

Towns.	Houses in 1851.	Inhabitants.	
		1846.	1851.
Melbourne	4,073	10,054	23,143
Geelong	1,592	2,065	8,291

Melbourne and its suburbs has now, probably, about 80,000; and Geelong and suburbs, 35,000 inhabitants: in the other towns and villages there are about 20,000; engaged in mining, about 76,000; and in pastoral and agricultural pursuits, about 40,000.

The population (previous to gold era) was more than doubled in five years—viz., from 23,879 in 1846, to 77,345 in 1851: these numbers do not include the aborigines, who are supposed not to exceed 2,500, living within the boundaries of Victoria.

On our first colonization of this portion of Australia, the aborigines were comparatively numerous: in 1844, about 700 males and females, of the tribes situated between Port Phillip and the river Murray, assembled in the vicinity of Melbourne, and encamped in their rude wigwams upon the grass of the open forest. But few now remain of this assemblage. Whether this remarkable people would have perished without the intervention of Europeans, or have

increased in numbers if England had not occupied the country, has been matter of discussion. I think we have no reason to assume the former, unless it be that the crimes inherent in these descendants of the first man who sinned, would ultimately have led to their extirpation by mutual destruction. Mr. Westgarth says—"nothing is better affirmed, than that cannibalism is a constant habit with this degraded race, who alternately revel in the kidney fat of their slain or captured enemies, and in the entire bodies of their own friends and relatives. Nor can the infant claim any security from the mother who bore it, against some ruthless law, or practice, or superstition, that on frequent occasions consigns the female progeny, and sometimes both sexes to destruction. On authentic testimony, bodies have been greedily devoured, even in a state of obvious and loathsome disease; and a mother has been observed deliberately destroying her young child, serving it up as food, and gathering around her the remainder of the family to enjoy the unnatural banquet."*

Admitting this horrible statement to be true—for the author who affirms it, although he furnishes no authorities on the point, is trustworthy, and evidently careful in his assertions—it affords no justification for the abandonment and destruction of the Australians; on the contrary, it is an incentive to greater exertions for their reclamation and preservation: the New Zealanders, as shown in my volume on that colony, were inveterate cannibals; but, by the blessing of God on the labours of the missionaries, this awful crime was rooted out from the land, and these now Christian fellow-subjects are among the finest specimens of our race in all that pertains to humanity. Unfortunately, the course at first adopted in Australia was entirely opposite to that pursued from the beginning by the missionaries towards the New Zealanders; and the result of public and private indifference in the one case, and of Christian philanthropy in the other, is manifested in the present condition of the two races. Recent official reports, from which the following abstracts are made, afford some gleams of hope for the preservation of at least a remnant of this singular people.

Commissioner Wright's Report, Wimmera District, January 1, 1852.—"All natives able and willing to work are sure to find employment. The character of the work performed by them, generally

* Westgarth's *Victoria*, 1853; p. 50-51.

light and of short duration; but some engage in permanent employment, and perhaps more will do so, impelled by the wages given them by the settlers in the great want of labour caused by the gold-discoveries. At all times, I believe, they received an amount of remuneration equivalent to the value of their services in clothing, food, and sometimes money. At the present time engagements are readily entered into with such as can be most depended on, at wages which, in ordinary years, would be looked upon as fair for European labour."

Commissioner Tyer's Report, February 4, 1852.—"The Manero and Omeo tribes still wander over the district, encamping at the several stock stations, where they can obtain food. A very few of these are occasionally employed as stockmen, shepherds, &c. The wild blacks, or natives of Gipps' Land, are much reduced in numbers by disease, and collisions with the neighbouring tribes. These occasionally visit some of the stock stations, but can seldom be induced to work."

Commissioner Fenwick's Report, February 12, 1852.—"Their harmless deportment, when sober, has secured to the Melbourne tribes general good feeling among the settlers and farmers. Their gross number, up to the end of last year, did not exceed 77, viz., 45 males and 32 females, and only five under 14 years of age, of both sexes. No collision appears to have taken place between the European and aboriginal population in this district, and the conduct of the natives has, upon the whole, been peaceable among themselves; the general state of their health is likewise said to have been satisfactory. Although there are instances, as heretofore, of the aborigines taking service at stations, and in various other occupations, there is as little dependence to be placed upon them as ever; they will work only when they choose."

Commissioner Gray's Report, Portland Bay District, Bunmenyong, February 20, 1852.—"They are now perfectly harmless, and I have not heard of any outrages whatever with Europeans. Towards civilisation they have made no progress. In the course of twenty years or less, in this district, they will be extinct, as few or no births take place, and the deaths from natural causes, and murders amongst themselves, are very numerous. Should one of any tribe die, they consider it imperative to kill one of another tribe. The settlers are, generally speaking, kind to them, and will always give remuneration for any labour they perform; and at some of the stations a distance in the interior, owing to the great scarcity of labour caused by the servants all going to the gold-mines, there are none but natives to look after the sheep. In such case they are more likely to remain permanent; but in one day they take a fancy to leave, and no persuasion nor remuneration would be the means of making them remain."

Commissioner M'Crae's Report, March 15, 1852.—"With the exception of Henry, who is of the Yarra tribe, all of the Gipps' Land have been employed in the immediate neighbourhood of Albeton, in the property known as Orr's Special Survey, during a portion of the last summer and autumn. They were engaged for two months, and were employed at first at weeding in the fields, and afterwards in reaping (nine of them), and served the full term of their engagement. According to my information, they worked steadily as many hours as the whites who were their fellow-labourers, and did the same amount of work. In addition to the usual

ration of the country, they had each (the nine) one ninth of a bottle of rum diluted and half a fig of tobacco. Their pay, or the consideration given for the labour of each, is stated to have been in money £2, and that there was also given to the party a gun of the value of 30s., one blanket, three shirts, one pair of trousers or cap, and about 2s. 6d. worth of powder and shot. I am also informed, by one of their employers, that a match was made between a party of three whites and another party consisting of two blacks and one white, which should reap soonest, and in the best manner, the greatest breadth or extent of wheat, and that the black party beat the whites. I regret to be obliged to mention, that two gallons of rum seems to have been the wager in this trial of skill; but as I was in the immediate neighbourhood of the reapers, and heard of no disturbance, I have no doubt that the rum (if then used) was consumed chiefly by a large party of whites, and probably much diluted, as they were all most anxious to get in their crops, that they might start for Mount Alexander. I would beg that it may be borne in mind that the employers, the persons mainly interested in the labour of the natives, always worked in the field with them, and saw, as it was evidently their interest to see, that the blacks had their rations according to agreement, and that they were all well treated by their fellow-labourers the whites.

"It would, therefore, appear, if I may be allowed to offer an opinion (which I do after a residence of twelve years in the colony, and many opportunities of studying the habits and dispositions of the aborigines), that in favourable circumstances, such as I have just brought under your notice, where the employer offers a fair remuneration, *keeps faith* with the black natives, and works with them, that their labour, not much if at all inferior in reaping (if instructed) to that of the whites, may be made available. I regret that I cannot here (or Melbourne) mention the number of acres weeded and reaped by these Gipps' Land blacks, but I know that it is considerable, probably from 100 to 120 acres. It may occur to you, that the payment in money stated to have been given to the blacks is large; be this as it may, it is beyond doubt that the work has been done by them. You will observe that a gun appears to have been given for part payment to the gang, in ignorance, doubtless, of the law. I shall desire my chief constable to reclaim it as soon as possible, seeing that an equivalent is given in money or in useful articles."

Report of W. Thomas, Esq., Guardian of Aborigines, dated July 5, 1852.—"There has not been, I am happy to state, any collision whatever between the white and aboriginal population in the counties of Bourke, Mornington, and Evelyn, during the last six months, nor has any aboriginal native been committed from the interior, evident proof, notwithstanding the temptations the aborigines are exposed to, that there is a growing good feeling between them and the colonists. Such, however, cannot be said among themselves. In these counties no less than four murders *inter se* have been committed, neither of which was seen by any European; so that the parties concerned therein, if known, cannot be brought to punishment, owing to the inadaptation of our laws to meet aboriginal delinquents when their crimes are *inter se*.

"The present condition of the aborigines have no way improved, but lamentably deteriorated. The discovery of gold has greatly affected their moral

condition; at all events those who locate these counties or make transient visits to them, with the exception of the Gipps' Land blacks, who appear much improved. There have been, during the last half year, upwards of 300 aboriginal natives at one time in these counties, from the N.N.W., W., and E. tribes; and all, except those from the E. (generally speaking), appear to have become habitual drunkards, male and female—I allude to the young—and in consequence are with great difficulty kept from the town. When there, they no longer ply with their tomahawks to cut wood for the inhabitants, but prowl about the public-houses and vile avenues, where they are encouraged by the improvident gold-diggers in drinking, even to rewarding them for so doing. On various occasions they have been so drunk as to be found lying in the highways during the night. Their thirst and propensity for ardent spirits is so great, that I have known them recently to go thirty miles to indulge their appetites. They are now brought to an awful and dangerous state of degradation, so that the speedy extinction of the Melbourne and Berrabool tribes are inevitable. Although the law is stringent upon those who supply blacks with liquor, it is now craftily evaded by them. Wherever a public-house is, in town or the bush, they will get drink. At Brighton they will give any child they see playing about, a few pence to get them a bottle of rum; in town they are so crafty, that if they see an idle fellow about they will give him 6d. or more to purchase them the same. Nor are they destitute of the means. One black showed me three half-crowns, and some smaller silver, that he and another had got for two days drinking. The consequence is, that their frames are enervated in the absence of regular exercise, and their blood corrupted through continued dissipation; so much so, that, when seized with a violent cold, inflammation follows so rapid that it is impossible in most cases to save them. The old and middle-aged do not die in any proportion to the young, who 'do not live out half their days.' Those who die by the visitation of the devil, are double the number of those who die by the visitation of God."

[Six tribes frequent the district under charge of Mr. Thomas; their aggregate number in June, 1852, was men, 235; women, 106; children, 7:—thus the females were not half the number of the males. In one tribe with 10 women, there was no child; in another with 37 women, only two children. There are reserves set aside for their use, but they are seldom occupied; flour, sugar, tea, and tobacco are given to the sick and aged.]

Further Report from Mr. Thomas, dated January 15, 1853:—"During the last six months no collision whatever has taken place between the white and aboriginal population in the counties of Bourke, Mornington, and Evelyn. As a colony, though of but seventeen years standing, we may congratulate ourselves, that the weapons of opposition between us and our sable fellow-subjects are laid aside; outrages on person and property have ceased, and the reaping-hook has been taken up for the benefit of the settler, in lieu of the spear against him; we may safely state that loop-holes in huts are no more needed, nor armed police, to keep aborigines in awe.

"Although peaceful with the white population, the feuds among themselves still continue. The Yarra blacks have, the whole of the past six months, been, comparatively speaking, as industrious as Europeans, which, in these times of scarcity of

labour, has been most opportunely for the squatter, sheep-farmer, and agriculturist. Five and six of them were for three weeks engaged at 10s. per week and rations at one station, performed their work well, remaining as agreed upon, till the washing was over. From this station they went to another, and so on, to my knowledge, at four sheep-stations near the source of the Plenty. At last an altercation had near taken place. The blacks came to me, on my having said 'they would not go to the next station under 25s. per week.' I was displeased with them, saying they had worked for 10s. and 15s. at the other stations; that they must not deceive Mr. Cammeron. I found that the blacks had been put up to this by a white man. They, in consequence, went at 15s., and finished their work. The middle-aged blacks remained, during November and December, at the foot of Mount Disappointment, where are, S.E. of the marshes, some extensive farms. They were engaged cutting bark, repairing of barn-roofs, weeding the wheat and oats from thistles, &c. This tribe are all now together gathering in the harvest, reaping, &c. An experienced farmer gave me to understand, that most of them were occupied on his and the surrounding farms: he had several reaping; two of whom cut each half-an-acre per day. All were not so ready. The middle-aged generally reap sitting, working themselves forward as they go on.

"Taking a general view of the two tribes locating these three counties, although, at every opportunity, like white profligates, the young are confirmed drunkards, yet they have, the last six months, yielded no small degree of labour to the community, which, in this dearth supply of labour, has been of infinite service, and frankly acknowledged by settlers and farmers. All efforts, however, to further improve their condition, have been tried without avail. I have pressed, and the farmers and others also have urged, their becoming as we are, not merely in work and diet; but to stop in house, and open convenient places at night, comfortably clad, is what they will hear nought of. The hook, axe, or bridle down, and all further of civilisation for the day is over. Off goes apparel, and they bask under the canopy of heaven as in their primitive wildness, evidently enjoying their freedom from incumbrance; nor do I conceive any further advancement beyond what they have obtained practicable to those in the settled districts, nor have they any desire to be meddled with further. Such is their wandering propensities, that not all the kindness, entreaty, or persuasion can secure them one day beyond their determination, and they have latterly been particularly cautious how they make bargains for labour on this account. The malediction pronounced upon the first offspring after the fall, seems peculiarly to meet the voluntary degradation of this people—'fugitives upon the face of the earth.' Nor do I know of any likely plan for improving the race generally, than that suggested to your honour of the 17th September last, the purport of which was, if not coercion, the removing the young as early as possible from their districts, and placing them under instruction. When out of their districts, they are compelled to be useful and stationary. There are two female servants in N. and S. Bourke, and two male servants in the county of Mornington, all from the westward, and all valuable servants, giving the greatest satisfaction."

Extract of Report from E. Bell, Esq., Commissioner of Crown Lands, Wimmera, 10th January

1853.—“Their usefulness to the white population has been very much increased during the present dearth of labour, produced by the attractions of the gold-fields. There is scarcely a station which the natives are in the habit of frequenting, where they have not been more or less employed. The system of turning sheep adrift and herding them like cattle, which has been forced upon the settlers, to a great degree, by the impossibility of procuring shepherds, is one for which their knowledge of the country, and facility of tracking, render them peculiarly adapted, and they have been found of great service in this way. They appear to be gradually acquiring a knowledge of the value of money, and have been temporarily engaged at rates of wages which, in ordinary times, would be considered high for emigrant labour. Their migratory propensities are not, however, diminished; and even those who have been longest employed on stations, and appear to have acquired a degree of European civilisation in dress and habits of living, are not to be debarred the luxury of occasionally throwing off the restraints of civilised life, and visiting their accustomed haunts, and joining in the sports and savage, though generally harmless, warfare of their respective tribes. Very few of them have engaged in the search for gold.”

Extract of Report from Charles J. Syers, Esq., Commissioner of Crown Lands, Gipps' Land, 15th January, 1853.—“The dearth of European labour, occasioned by the discovery of the gold-fields, has no doubt led to improvement in their position in relation to the Europeans, inasmuch as a portion of the labour thus withdrawn has been replaced by the aborigines, and the intercourse between the two races consequently increased. Their services have been in requisition as sheep-washers, stockmen, shepherds, and reapers, and, in two or three instances, even as house-servants. In a letter to me from Mr. W. O. Raymond, a large stockholder in this district, who employed the Dergo tribe in sheep-washing (I believe 12,000 sheep), that gentleman states—‘I have found them most useful; indeed, I could not have washed my sheep without them. I paid them for each day's wages 1s. each.’ Some were also employed in washing Mr. Macmillan's sheep. Mr. Campbell, the superintendent of the Swan Reach station, has acquainted me, that he has occasionally employed a few of them as shepherds, and that two remained in that capacity for seven weeks, but that he could not depend upon their continuing such avocations for any length of time consecutively. At Bavinsdale, the head station of Messrs. R. Campbell and Co., some have been usefully employed in reaping; and at Lucknuon, Mr. F. Jones has obtained the services of several as shepherds, and others as reapers. Mr. Hoddinot, a sheep-farmer, near Port Albert, has informed me, that he has employed several of the Yarra tribe as shepherds, and that they have behaved very well. Besides these, I have heard that other settlers have availed themselves of their services as shepherds; among whom have been mentioned Mr. James Davis, of Woodside; Mr. James McFarlane, of Hayfield; and Mr. Wilkie, of Tongcomungee. Two of the Plains tribe have been in my service for several months, one as cook and waiter, and the other as messenger. They made themselves generally useful, and behaved remarkably well; but I have been recently obliged to accede to their request for permission to return to their tribe.

“Notwithstanding the opportunities they have had, by their increased intercourse with the settlers, I cannot say that they have made any progress in civilisation. They still conform to their savage habits and mode of life. Too idle to cultivate the soil and to lay up provision for to-morrow, they hold to their wandering propensities when unemployed by the white population; and are satisfied with the scanty food which their indolent life allows them to obtain from the gum-trees, or from the rivers and lakes.

“P.S.—Since writing the above, I have received a letter from Mr. F. Jones, on the subject of the employment of the aborigines, of which the following is an extract:—‘It is no figure of speech to assert that, wanting their services, I could neither have washed my sheep, nor secured my wheat-crop this season; for instance, eight of them reaped four and a-half acres in two days, with the help of only one white labourer: nor, indeed, could I have carried on the ordinary work of the station without their assistance. Two lads have shepherded 2,000 sheep since the month of May last. They have certainly proved themselves more useful generally, in time of need, than I ever expected.’”

Extract of a Report from H. W. H. Smythe, Esq., dated Commissioner of Crown Lands' Office, May Day Hills, 18th January, 1853.—“In January last, I made a special report as to the numerical strength of the aborigines in this district, estimating them as 399 of men, women, and children. Since then I have personally witnessed the death of several of them, and my impression is that they are rapidly disappearing from the face of the earth. I perceive the use of intoxicating liquors is greatly on the increase; and, whilst under its influence, the natives are very dangerous. There are instances where some of them make themselves useful as stock-men and bullock-drivers, but these cases are the exceptions. Even the allurements of gold-seeking cannot overcome the natural indolence of their disposition. The Chinaman, the Lascar, the New Zealander, Malay, and African, are to be seen working in parties, but in no case is the aborigine to be met with.”

From William Gray, Esq., Crown Lands' Office, Portland Bay District, February 3, 1853.—“I am very sorry to say, the aborigines make no progress towards civilisation, nor is there any change in their miserable condition. No outrage of any kind has been brought under my observation as having been committed by or upon them. In carrying out their own laws, they frequently commit, amongst themselves, what would be constituted murder by Europeans. This, coupled with numerous deaths from consumption, and from no births taking place, they will soon become extinct. The settlers are kind to them, and will at any time give them employment; but no dependence can be placed on their remaining for any period, as their laws make it imperative upon them to attend various meetings of tribes to go through certain ceremonies. However, on some of the distant stations, when they have not been corrupted by Europeans, and still keep to their primitive state, more confidence can be placed in their remaining; for if the men go, they will leave the women to do the work. Some make shepherds at these stations; and in sheep-washing, at all stations, they are of considerable service, and some few can even shear sheep.” [The official reports vary, but the whole tenor is in favour of the aborigines: the advantage of just dealing and kind treatment is fully exemplified.]

Since the census of March, 1851, there have been no complete returns of the population. The immigration during 1851, was:—

Immigrants.	Males.	Females	Total.
Assisted by Government	1,383	1,168	2,551
Unassisted	1,688	1,164	2,852
Total	3,071	2,332	5,403

A large proportion of these were adults—viz., above 14 years of age—males, 2,477; females, 1,741=4,218: the number under 12 months was 86:—of the *unassisted*, 2,488 were from England, and 286 from Scotland; of the *assisted*, 980 were Irish, 841 English, and 726 Scotch. The deaths during the voyage, of the assisted immigrants, were 47, of whom 22 were under one year old, and 39 under 14 years of age: the births during the voyage, were 27. The monthly immigration, during 1852, is given at p. 436; it shows that 104,683 recorded persons arrived in, and 27,082 departed from, the colony in that year. There arrived, during the year ending 31st December, 1851, in Victoria, 2,551 assisted, and 2,852 unassisted immigrants.*

On the 31st December, 1852, the population within the limits of the colony is stated officially thus:—

Inhabitants.	Males.	Females.	Total.
Increase by Immigration	74,872	19,792	94,664
" by Births	1,868	1,888	3,756
Decrease by Deaths	—	—	2,105
Departure by Sea	28,620	2,418	31,038
Population 31st Dec. 1851	—	—	83,350
" " 1852	—	—	148,627
Aborigines, about	—	—	2,500
Total	—	—	366,040

Other accounts give the numbers in Victoria at this period as not less than 200,000.

No returns have yet reached me (March, 1854) of the immigration during 1853. The following table shows the estimated population at the several gold-fields in Aug., 1853:—

—	Men.	Women	Children	Total.
Forest Creek	14,100	2,630	2,410	19,140
Bendigo	17,900	5,100	6,300	29,300
Ballarat	6,950	1,725	1,965	10,640
Ovens'	3,100	435	265	3,800
M'Ivor, &c.	4,500	850	650	6,000
Total	46,500	10,740	11,590	68,880

Any authentic returns which may arrive from Australia before this "Supplement" be finally closed, will be given in the *Appendix*. Judging from imperfect data, I think there are now about 250,000 persons in Victoria.

Details of the number of persons professing different forms of Christianity, and of the state of education at the period of the census in March, 1851, will be found in the *Appendix*.

The recent separation of the district from New South Wales, and the turmoil occasioned by the gold-discoveries, have, it is stated, precluded the preparation of statistical returns from Victoria—which, however, are said to be in progress. With the abundant means at the command of the authorities, it is discreditable that these treasuries of facts have been neglected, and that to a private individual (Mr. Westgarth) we are chiefly indebted for the little that has yet been done on this head.

The following is from an official return, showing the state of education on 31st December, 1852:—

Denominations.	Schools.	Scholars.			Support.	
		Males.	Females.	Total.	By Govern-ment.	By Voluntary Contributions.
Church of England	36	1,670	1,413	3,083	£ 3,118	£ 1,747
Presbyterian	8	270	151	421	538	609
Free Presbyterian	6	189	126	315	303	375
Wesleyan	7	508	387	895	436	842
Independent	5	155	142	297	249	299
Roman Catholics	27	1,019	806	1,825	1,343	1,529
Total	89	3,811	3,025	6,836	5,989	5,403
National	9	292	241	533	614	328†
Private	17	219	253	472	—	—

† School-fees.

* By the truly benevolent exertions of Mrs. Chisholm many deserving emigrants have been sent to Victoria as well as to New South Wales. The first "remittance-roll" which this excellent woman received, contained a sum of £2,824, which was sent by 137 persons, in sums varying from 10s. to £150:

It would appear from the foregoing, that, out of a population of nearly 200,000, there were not 8,000 children under instruction in the denominational, national, and private schools. This confirms the statement shown in the census of 1851—viz., that there were then 22,157 persons who could not read, and 11,557 who could read, but not write.

Crime for 1851-'2, without reference to increase of population, is thus shown :—

Years.	Convicted of Murder.	Felonies.	Misdemeanours.	Criminals Executed.	Civil Cases in Supreme Court.
1852	2	366	103	2	80
1851	1	151	18	1	72

Religion.—Number of churches and chapels, December, 1852—49; attended generally by 14,520 persons. The church of England have 13 places of worship—Wesleyans, 17; Presbyterians, seven; Independents, three; Baptists, two; Roman Catholic, six; and Jews, one.

Agriculture.—The cultivation and stock returns are defective. In 1852, there were under grain-crops—wheat, 16,823; maize, 1; barley, 411; oats, 2,947; potatoes, 1,978—acres. *Produce.*—Wheat, 498,704 bushels; maize, 61; barley, 9,431; oats, 96,980; potatoes, 4,512—bushels. *Live-Stock*, in 1852.—Horses, 34,021; horned cattle, 531,380; sheep, 6,551,506; pigs, 8,996: on all these there was an increase, as compared with the previous year, owing partly to large importations from neighbouring colonies. The land under vineyards was 107 acres, and the produce—wine, 4,500; brandy, 500—gallons. The live-stock slaughtered in 1852, consisted of—horned cattle, 56,668; sheep, 740,996; pigs, 5,106. Boiling-down establishments, five; sheep slaughtered, 8,000; horned cattle, 600; tallow produced 2,000 cwt.*

This agricultural return, from such an extensive arable colony, exhibits great neglect of the natural riches of the soil.† Many attribute the evil of being dependent on

foreign countries for a great amount of food which might be grown at home, to the squatting system, and the immense tracts thus monopolised. The system will have to undergo revision by parliament: all that can be done here, is to mention a few facts on both sides of the question.

On 1st July, 1831, unlocated lands in Australia were, for the first time, sold at the minimum price of 5s. per acre; on 1st January, 1839, the up-set price of all lands was raised to 12s. per acre; and in January, 1843, the minimum price for sales by auction was fixed at 20s. On 19th June, 1850, orders in council were passed, empowering the grant of leases of lands for periods not exceeding one year, for pastoral or other purposes, and authorising the holder of any lease to purchase any part of the land specified in his lease for its *fair value*, in an unimproved state, not being less than the minimum up-set price prescribed by the government regulations for the time being.

The land sold in the colony up to 30th June, 1851, was—63,289 acres, put up at 5s. and 12s. (average price, 13s.), which brought £41,327; 128,059 acres, refused at public auction at 20s., sold by private sale at the up-set price, £128,059; 198,746 acres produced by auction, £605,673. Thus, 390,094 acres averaged nearly £2 per acre ‡—£775,599. Some lands in the interior townships brought £10 to £100 per acre.

Under an order in council, the territory of the colony on 8th March, 1847, was divided into three classes—*settled*, *intermediate*, and *unsettled*. The *first*, comprised all lands within 25 miles of Melbourne, 15 of Geelong, 10 of Portland, Alberton, and Belfast, and within two miles of the sea-coast of the whole colony—the estimated area being about 3,000,000 acres; the *second*, comprised the 16 counties of Victoria and the whole of Gipps' Land, not contained in the first area—about 20,000,000 acres; the *third*, the remainder of the colony—2,500,000 acres—which may be sold when surveyed. It is calculated that there are 20,000,000 acres leased to the

of the above, sixty-one remitted the money for the emigration of their parents. This self-supporting system is now being extended: the Legislative Council of New South Wales have placed at the disposal of the *Family Colonization Loan Society* (which originated with Mrs. Chisholm, the Right Hon. Sydney Herbert, Mr. Samuel Sydney, and other philanthropic individuals) funds for the promotion of emigration—to be advanced, by way of loan, in part payment of passages to that colony—and to be repaid under easily-obtained guarantees.

* There were, in Victoria, in 1852, breweries, 13; tanneries, 8; coach-manufactories, 20; engineer and foundry establishments, 6; ship-building yards, 2: and 33 mills for grinding and dressing grain.

† The agricultural advantages of the Australian colonies are set forth in some *Notes*, by Mr. Edward Saunders, of what he "*saw, heard, or thought*," during a visit to those settlements in 1852-'3; printed at Bath by Keane, 1853.

‡ Land sold in 1852—acres, 258,144, for £701,172—to 3,134 purchasers; average £2 14s. per acre.

"squatters," which, at the expiration of each year of lease, may be put up for sale by auction, subject to the proviso of permitting the lessee to purchase such portion as he may require at its fair value.

The quantity of land situated beyond the settled districts of Port Phillip in May, 1849, was 29,464,240 acres; the number of licenses issued for "runs"—that is, for the pastoral occupation of these tracts—was 827; and the average number of acres in each "run," 35,627=55 $\frac{2}{3}$ square miles: the fees paid for licenses in the previous year, amounted to £18,452, and the assessment on stock, to £10,385=£28,837.

The limits are imperfectly defined, as the squatters objected to pay £2 per lineal mile for the survey of their runs, which they asserted would cost £60,000.

The whole area of Victoria is supposed to be about 62,000,000, of which the squatters now hold about 60,000,000 acres, paying, in license-fees, about £14,000, and for assessment on stock, £16,000=£30,000 per annum, or at the rate of £500 for each million acres of land which has hitherto been sold at an average price of about £2 per acre.

It is alleged that the squatters have not done any act to entitle them to hold the vast tracts now claimed;—made no roads, imported no immigrants, and, with few exceptions, explored no country. The whole sum paid by squatters, for 16 years, for about 60,000,000 acres, was— from 1836 to July, 1851, assessment on stock,* £94,951; license to depasture ditto, £145,454: about 870 squatters have thus paid £240,405. In 1849, eleven squatters held 4 $\frac{1}{2}$ million acres, and only paid £320 a-year for the same.

The views of the colonists, who are not squatters, are stated at some length by Mr. John Pascoe Fawkner (a member of the Legislative Council, and who designates himself as the "founder of the colony.") He says, that the squatters have held, for 16 years, nearly the whole lands of the settlement, for which they have paid "somewhere about £15,000 per annum;" while the land bought by the settlers has been at "a cost per head to the whole population—man, woman, and child—upwards of £10 sterling each." In a letter to Sir John Pakington, Mr. Fawkner dwells at much

length† on the evils and injustice of the squatting system, and thus refers to the pre-emptive right of the leaseholders:—

"Turn now to the pre-emptive right granted to the squatter alongside of some of these country towns. The government valuator employed to ascertain the value and fix the price to be paid by the squatter, did actually (see returns) fix the minimum price of £1 per acre, alongside of country town-lands sold by auction for from £8 to above £100 per acre. The squatter's pre-emptive right and title to lease is based on, and the orders in council were obtained under and by virtue of, fraudulent misrepresentations put forth by the Legislative Council of Sydney, New South Wales, and supported by the squatters and their partisans in London. The committee of the Legislative Council, and the witnesses they examined, declared that the lands of the colony were not worth the smallest coin current in Britain. They did make some trifling exceptions. And thus, by classing Port Phillip with the barren parts of New South Wales, obtained the same rules for this fertile country that might in part suit that colony—viz., New South Wales Proper.

"The land-returns made to the legislature here in June, 1852, of the lands sold to 30th June, 1851, completely disprove the representations of the above-named committee and their chosen witnesses. They distinctly stated that an up-set price of £1 per acre would prevent the lands from being sold. The above return is an answer in full to this false statement. Let us see the extent of this colony or province. Mr. Westgarth's *History of Port Phillip* gives the area of the colony as containing 97,000 square miles. This gives us in round numbers 62,080,000 acres. The squatters have for years asserted that they have all the useful grazing land in their possession beyond the settled districts. The settled districts are thought to contain the odd 2,080,000 acres; therefore the squatters hold about 60,000,000 acres, and for which they paid last year license-fees (they say), £14,000, and by way of assessment (as they say), £16,000, or, in the gross, £30,000, or at the rate of £500 a-year for each million of acres for lands that have hitherto sold at nearly £2 per acre, as per government-returns furnished to the Legislative Council.

"These men, the squatters, say now, that they cannot pay one halfpenny per annum per head for the feed of their sheep, and this, too, for land that sells at nearly £2 per acre, and of which land they claim to monopolise ten acres for each sheep rent-free. Yet they say they cannot pay one halfpenny per year for each ten acres of land, although they get yearly near 3 lbs. of wool per sheep, worth from 3s. to 4s. 6d. They declare that they will not pay any sum for the grass used by their flocks and herds, and virtually that the orders in council have consigned the whole of the lands of the colony into their hands, and that they will keep possession of them. To prove this, I add, that the squatters who have seats in the Legislative Council of Victoria, declared in the present sittings of that body, that "they would not tax themselves;" and they did join together, and refused to continue the assessment upon stock of one halfpenny per head per annum upon sheep, and proportionate sum upon cattle and horses.

"The squatters have not done any one act for this colony, or for this people, to entitle them to such undue advantages as they claim—viz., to hold possession of 60,000,000 acres of land, a great part of

* One halfpenny per sheep per annum.

† See Parl. Papers on Australian Crown Land, 6th May, 1853, pp. 158—162.

which is rich agricultural land, for which, to the extent of from £3 to £4 per acre, would have been given by public auction, had not the squatter interfered and prevented the sale, after the lands were advertised, and people collected at the auction-room, from 50 miles distant, prepared to buy these lands. The squatter has not done any act to entitle him to hold his eight or nine hundredth part of 60,000,000 acres for his proportionate share of £14,000 a-year; and it is a well-known fact, that the lands cultivated by the squatters is worth far more than this sum yearly, 5s. per acre being the lowest sum usually paid in the interior for poor land to graze stock upon—that is to say, wherever the lands are sold;—Kilmore special survey to wit.

“The squatter has not made any roads, nor paid for making any; the squatter has not paid any money to import immigrants from Great Britain or Ireland, but they have done so to import pagans and savages from China, from India, and from the South Sea Islands. The present squatters, with very few exceptions, did not explore the country—did not venture their lives amongst the simple aborigines; and the early squatters who did assist to found this colony, and open up the country, received no reward nor no encouragement, save a yearly license to graze their flocks and herds; and the men, in truth, and sober fact, who have ousted the earlier settler, have been rewarded with what should have fallen to the real squatter-settlers who explored the country.

“The squatters hold these lands very unequally amongst them. The government never adopted any system, but let them take land in any quantities they chose, without respect to the quantity of stock they held. In fact, no plan was ever acted upon. The return of squatters, laid upon the Sydney council table, and ordered to be printed, May 22nd, 1849, fully shows this, as follows:—

Monopoly of Land by Squatters in Victoria.	Number of Persons holding Licenses.	Number of Licenses.	Money paid for Licenses.	Land held, in Acres.
When less than 25,000 acres are held by each person	339	347	3,470	4,599,304
Not above 50,000	153	180	1,800	5,304,014
" 100,000	103	162	1,620	7,141,107
" 150,000	33	52	520	3,996,109
" 200,000	16	31	310	2,660,960
" 250,000	5	16	160	1,094,638
" 300,000	4	11	110	1,064,805
" 400,000	3	10	100	1,079,120
" 450,000	* 1	5	50	408,583
" 650,000	2	5	50	1,272,000
" 850,000	1	1	10	845,600

* Eleven persons holding 4,570,108 acres.

“Thus, 339 persons, paying £3,470, hold for this sum, 4,599,304 acres; the next, 153 and 103—256 persons, paying £3,420, hold for this, 12,443,121 acres, nearly three times the first 339 men’s portion; and the last 11 persons, holding 32 licenses, and

* The consequence of neglected agriculture is shown in the cost of imported food in the year 1852, viz., wheat, 87,570; maize, 81,182; barley, oats, and peas, 254,803—bushels; flour and bread, 23,101 tons; rice, 969,920 lbs.; potatoes, 3,475 tons; malt,

paying only the sum of £320, hold lands to the extent of 4,570,108 acres, or within 30,000 acres of the quantity held by the first 339 persons, paying £3,470 a-year—viz., for one-tenth of the sum. The total number of persons accounted for in this return, with the quantities of land they held, was 660 persons, holding 820 licenses, paying yearly, £8,200, holding jointly, 29,464,240 acres; and there are six persons on the same list, holding seven licenses, paying £70, who refused to return the quantities of land they held. Possibly the other 30,000,000 acres are held by these six and the other 660 jointly.

“Now, if 339 persons could claim, by any acts of theirs, a right to monopolise four millions and a-half of acres of land, worth at least four millions and a-half of pounds sterling, what right can another 11 squatters claim an almost equal quantity, whilst they only pay £320 a-year to the first number’s £3,470 a-year, or less than one-tenth the sum for nearly the same quantity of land, worth at least four millions and a-half of British money?—£320 a-year for land worth £4,500,000! Again, let us compare 391,094 acres, a less quantity of land than is held singly by each of the 11 individuals before referred to. These 391,094 acres were sold; part by private sale, part by public auction; some put up at 5s. per acre, part put up at 12s. per acre; and yet these lands realised £776,841 odd. Each of the above 11 persons hold lands that are, or may be, worth £2 per acre—lands worth £776,841 to each of the eleven—yet they only pay less than £30 each, or, collectively, £320 a-year for eleven times as much land as sold for £776,841, for upwards of 4,500,000 acres; that is to say, they hold these lands, or did hold them, according to the return quoted before, and the present holders claim under their title.

“A large population are now spread and spreading over this colony. There are numerous small towns and villages laid out through the length and the breadth of the country. The colony is in reality settled in its breadth and length; and the discovery of gold has introduced many thousands, who are fixing themselves in the interior, and many more thousands are coming. These people want bread-stuffs. The carriage from the town costs in winter from £50 to £180 per ton. Bread or flour costs these prices for carriage *only*. These bread-stuffs can be grown on the lands adjoining the mines, and that, too, from 30 to 50 bushels of wheat per acre, upon lands that the squatters say it takes 10 acres for a sheep, and they cannot pay one halfpenny per sheep per annum.*

“Yet they demand to keep these lands. The lands are really worth, where good, from 20s. to 50s. an acre, and plenty of people ready to buy them; and these poor squatters say they cannot pay one halfpenny per 10 acres. Is this just to the people here? Is the prevention of these lands from sale, and the withholding this money from the treasury, and from importing immigrants—is this politic, or is it just? These lands could be sold. The money would help Great Britain, by finding vent for its surplus population. This money would create a vast demand for her manufactures, as every immigrant, when settled here, demands and consumes at least £10 worth of British goods yearly. A pauper can thus be taken 2,621 bushels: total value, £564,881. Quantity and value exported in 1852:—Wheat, 25,249; barley, oats, and peas, 627—bushels; rice, 31,696 lbs.; potatoes, 34 tons: total value, £12,304. About 15,000 tons of flour are required for 1853.

from the ranks of the tax-eaters, and made a tax-contributor. Thousands—nay millions of British subjects can be provided with homes here, and made (them and their families) comfortable—yes, independent and happy—instead of locking up this fine country in the hands of less than 1,000 persons—these 60,000,000 acres.*”

The case of the squatters is set forth in a petition to the Queen in September, 1852, of which the following is an abstract :—

“That the great bulk of the waste lands of the Crown in this colony was first discovered and occupied by the present licensed occupants, or by their predecessors, whose interests in such waste lands, as conferred by the Crown, they purchased, and whom they now represent.

“That the flocks and herds introduced by your Majesty’s petitioners and their predecessors have given a value to the land which could have been imparted to it in no other way, and have been the means of creating an export of wool and tallow, which has been hitherto the chief cause of the prosperity of this colony, and proved of vast importance to the mother-country.

“That the value of this export of wool and tallow amounted, in 1850, to upwards of £1,000,000 sterling.

“That in the discovery and settlement of this country, your Majesty’s petitioners, and those whom they represent, expended much capital, experienced great personal hardships, and made great social sacrifices—were continually exposed to great risk of life and property, passing a life of great hardship and privation, and that for many years, owing to the high price of labour, to the losses consequent on a new settlement, and other causes, the profits of your petitioners were so small and precarious, that many of the first settlers became insolvent.

“That in consideration of the causes shortly stated above, and for divers other good reasons, an act was passed by the Imperial Parliament in the year 1846, empowering your Majesty to grant leases of eight and 14 years to your petitioners, and to make regulation, by order in council, as to the terms on which such leases should be granted, and for other matters connected therewith, as more fully alluded to in the explanatory despatches of your Majesty’s secretary of state to the governor of New South Wales, accompanying the orders in council.

“That in pursuance of the authority thus vested in your Majesty, your Majesty did, on the 8th day of March, 1847, by order in council, divide the lands of this colony into three classes, called respectively the settled, intermediate, and unsettled districts.

“That by these orders in council, your Majesty declared that the occupants of land in the unsettled districts should be entitled to demand leases of their respective runs, and the governor was empowered to grant such leases for 14 years, subject to certain reservations for public purposes therein specified.

“That within lands coming within the description of intermediate lands, your Majesty further declared that leases should be acquired on similar conditions, but that they should only last for eight years, and that at the expiration of each year of the lease, the governor, on giving to the lessee 60 days’ notice, might offer the whole or any part of such lands for

sale by auction, subject to the right of the lessee to purchase any portion of them at their fair value, ascertained by arbitration in the mode pointed out by such orders.

“That in the settled district, leases for exclusively pastoral purposes should be granted for one year, but revocable should the land be required for sale.

“That the settled district comprises all lands within 25 miles of Melbourne; 15 miles of Geelong; 10 miles of Portland, Alberton, and Belfast; and within two miles of the sea-coast of the whole colony. It is computed to contain an area of about 3,000,000 acres.

“That the intermediate district comprises the 16 counties of Victoria, and the whole of Gipps’ Land, not contained in the settled district, and is computed to contain about 20,900,000 acres.

“That the purchased lands amount to about 400,000 acres, not one-tenth part of which has ever as yet been brought under the plough—while the cultivation of the arable lands which were under tillage previous to the discovery of the gold, has been, in a great measure, since then abandoned for the more lucrative pursuit of gold-digging, and that there are upwards of 2,500,000 acres which may be put up for sale by public competition as soon as the surveys of them are complete; and 20,000,000 which may be put up for sale at the expiration of each year of lease, subject to the proviso permitting the lessee to purchase such portion as he may require at its fair value; so that with a population of 120,000, or even if it amounted to many millions, there is no just pretence for saying that there is not sufficient land at present obtainable for all agricultural purposes required by the colony, or that the lands of the colony would be confiscated or occupied prejudicially to the general interests of the colony, if leases for the limited terms contemplated by the orders in council, were issued to the licensed occupants, the public interest being protected by the proviso above cited.

“That your petitioners have made their claims for leases within the time prescribed by the orders in council, but that, owing to some cause with which your petitioners are not acquainted, the lieutenant-governor of this colony has not issued any leases to your petitioners, nor has he declared when they are to issue, nor the time from which they are to date, although frequently requested so to do, and the governor-general in the neighbouring colony of New South Wales has declared, that, in that colony, leases under these orders are to issue and to bear date 1st day of January, 1852.

“That on the faith of these orders in council many persons have invested their entire capital in the purchase of runs, and that claims to leases, with the privilege of purchasing at a valuation, were made transferable through the sanction of government, by the proclamation of the 30th June, 1848; the language of which is so clear and expressed, as to the right to sell leases, which many of your petitioners have bought, that they cannot but consider that it will be impossible to deprive your Majesty’s petitioners of the rights acquired by them under so express a sanction, without disregarding entirely those principles which are essential to the protection of property and of public faith.

“That very large sums of money have, upon the faith of the above proclamation, been paid by persons settling in this colony, in the purchase of leases by such proclamation authorised to be sold, believing that the capital brought over by them for the purpose

* Parl. Papers, 6th May, 1853, pp. 159—60.

of investment and enterprise, could not be more securely laid out, or more beneficially employed, than in the acquiring of an interest guaranteed by the Crown, in connection with an occupation to which the colony owed its progress, and by which the mother-country had been, and still is, immensely benefited.

"That the withholding of leases, on the part of the government, has discouraged your petitioners from taking those steps for dispensing with labour which they might otherwise have taken, by fencing and procuring permanent water by artificial means. The present great want of manual labour in the colony, joined with the before-mentioned withholding of the leases, is certain materially to impair, both in quality and quantity, that export of wool, which has conduced so much to the past prosperity of this colony, and has at the same time promoted the manufacturing interests of the mother-country.

"That a party in this colony look with jealousy at the increased value which the holdings of your petitioners, in common with all other property, are likely to derive from the discovery of gold, and as your petitioners are informed, have petitioned your Majesty to revoke the orders in council, and to break your Majesty's promise, and the good faith of parliament, pledged to your petitioners.

"That your petitioners feel that it might be considered an insult to your Majesty to conclude with a prayer, that your Majesty would preserve inviolate a pledge solemnly given. It is, therefore, from no distrust in your Majesty's good faith that they now approach your Majesty on this subject, which they would not have done did they not fear that their silence might be construed into an approval of the proceedings of these persons before-mentioned, and an indifference to their own rights.

"Your petitioners therefore pray, that your Majesty will give directions to the lieutenant-governor of Victoria, to carry out the orders in council in the spirit in which they were made, by issuing leases to your petitioners, dated, as proposed by the governor-general in New South Wales, from the first day of January, one thousand eight hundred and fifty-two, and securing to them the rights guaranteed by these orders.

"And your petitioners will ever pray."

(Signed by ninety-two licensed occupants.)

The possession of a lease would the better enable a squatter to sell his right of pasturage and power of pre-emption of the land, at what is called a "fair valuation."

It is, however, impossible to value that of which the value has never been tested, especially in a new country, where no fixed data of any description exist, and where land, worth one day 20s., may, before the end of a month, be sold for £50 an acre. Lieutenant-governor Latrobe has written a long (85 paragraphs) and able despatch on this highly-important subject.* The gist of his opinions seem to be conveyed in the following extract from that despatch: referring to the difficulty of ascertaining the

worth of land, and to the right claimed by the squatters of purchasing any of, or all, the vast territory now held by them under lease at 20s. per acre, Mr. Latrobe says:—

"Even lands sold at public auction are seen, every hour, and on every hand, to be transferred at hundreds per cent. over the original cost. The system of open sale by auction has at least this advantage—that whatever fluctuation the times may produce, the government does not come into collision with popular feeling or popular suspicion, right or wrong. But no system whatever, however seemingly just and carefully administered, will relieve the government from the odium of having betrayed the public interests, whether from incaution or ignorance, or by design, if the land valued to-day at a given price should prove, in the hands of the fortunate purchaser under pre-emptive right, to be considered worth fifty times as much to-morrow. And in the state in which this colony now is, the occurrence of such cases is unavoidable, and I make no doubt must have their effect upon the mass of the population, already disposed to dispute the justice of the pre-emptive right of a limited and distinct class, and to chafe under the imaginary or real obstacles which the advantages claimed by them interpose to the unlimited purchase of crown-lands, to which the ready acquisition of great and unexpected wealth has disposed the whole community.

"71. I cannot go further into detail; but I would earnestly seek to impress upon her Majesty's government, that the concession of a right of pre-emption so extended to the licensee, claimed as it is even now by the mere applicants for lease, was scarcely justifiable or called for, even were it not found to involve so great an abandonment of the system of open sale by auction, which had worked so well and advantageously for the colonial interests, and the introduction of a system of valuation which must bring the government and the public feeling, if once aroused, into collision, and which never can be satisfactorily administered under the present extraordinary circumstances of the colony.

"72. Taking the view which I am necessitated to do of the whole question, and of the consequences which the carrying out of these orders in council in their integrity in Victoria might entail, I cannot discharge my duty otherwise than by pressing the facts set forth in the above statement, and in the enclosures to this despatch, upon the most serious attention of her Majesty's government. I would make every allowance for the weakness, want of correct information, or unsound reasoning shown by either of the parties standing in open opposition to each other, and for the influence of passing occurrences upon the temper of the colonists. I admit the extreme view which the stock-holder is now disposed to take of rights or claims, which, however originally unsought, are now held to be conceded, and therefore to be asserted at all hazards. I concede, on the other hand, that there may not only be much ignorance and prejudice in the view taken of the real result of the concessions made under the orders in council in favour of the pastoral interest, provided that the power of government to sell land, when required, were once shown to be undoubted. Further, that the object aimed at by some who mingle in the discussion on what must be called the popular side, though not at this time fully

* See Parl. Papers, 6th May, 1853, pp. 97 to 114, dated Melbourne, 3rd September, 1852.

declared, is nothing short of the entire sacrifice of the pastoral interest, in favour of the passions, and cravings, and supposed advantage of the large monied population springing up amongst us. But I am constrained to look upon the whole question as one of a very serious character, and to conclude that the revision of the orders in council of March, 1847, as far as it may be legally practicable, is most undoubtedly called for.

"73. That the pastoral interest should be protected requires no demonstration. Its due maintenance is, for the present, as necessary to the welfare and prosperity of the province, as for the advantage of the mother-country. It never can be overlooked, that but for the supplies which it has been enabled to pour into the gold districts, to the assistance of the thousands upon thousands, rushing without due preparation and foresight beyond the reach of the ordinary means of sustenance, the riches of the gold-fields themselves could never have been developed as they have been. The peculiar and embarrassing circumstances in which this great interest is seen to be placed, in consequence of these very gold-discoveries, may present further argument why it should meet with every degree of consideration. The fullest assurance should be given that the occupant of the waste lands of the Crown for pastoral purposes, whether in the 'intermediate' or 'unsettled districts,' will be protected in his occupation till such time as the progress of the colony may demand the appropriation of the land to other purposes; and to this end it is imperative that a lease should issue in such form as may at least place his position with regard to the Crown and the public beyond all doubt.

"To the concession of a pre-emptive right of purchase to a certain limited portion of land, I find no objection opposed of sufficient weight as the case now stands, to justify denial. The precise amount within the maximum area decided upon, should be determined under such rules of general application, and further special consideration in each case, as the lieutenant-governor and Executive Council may prescribe; but beyond this, I think it were well if all claim to the exercise of a pre-emptive right of purchase over lands beyond the settled districts of the colony, held under lease, should be extinguished. The restriction upon the power of sale to any but the lessee himself should be done away with; and beyond the limited exercise of pre-emptive right of purchase of sections containing homestead and improvements, already adverted to, no departure from open sale by auction admitted, either in the case of land applied for and sold at the solicitation of the lessee, or that which may be brought into the market by the lieutenant-governor, from a view of the public requirements.

"74. If the orders in council, when properly interpreted, are seen to have given to the stockholder rights, which cannot now be justly taken away—I believe I speak the sentiments of the colonists as a body—let compensation be made, at any sacrifice; but, at every risk, let these exclusive rights, where they are seen to operate to the public disadvantage, in appearance, if not in reality, be done away with.

"75. Further, the power of the Crown to resume possession, for appropriation to the public service, or to dispose by open sale of such portions of land, in any quarter of the colony, as may clearly be judged necessary for the public advantage, must be

placed beyond all contestation. The circumstances of the times, and the changes now operating on the character, means, and prospects of the great mass of the colonists, urgently require that this should be the case. The pastoral interest, great as it undeniably is, cannot be opposed to the forward and irrepensible movement of regular settlement in any direction, or advance a claim, sustained by the annual payment of a rent, it may be, of less than one farthing per acre, to retain possession, with the privilege of purchasing without competition, of lands which, did no such claim exist, might be thrown open to settled occupation and improvement, under a system of sale, which would at least restore all interests to the same level, and give room for no charge of mismanagement or favouritism on the part of the government of the colony. The pastoral interests must become more restricted, as the agricultural may be presumed to acquire strength, by every sale of land.

"76. But were these changes effected, I do not anticipate that the pastoral interests would be seriously perilled or injured for many years to come; for it would be the duty of government, as well as to the benefit of the colony, that the power which it might possess of bringing land into the market should not be lightly exercised; the undoubted requirements of the community always being held distinct from the wishes and speculations of individuals. In many parts of the country, especially those traversed by the auriferous strata, or adjacent to them, undisturbed tenure for any length of time might be very doubtful; for no law or regulation could protect the occupant for pastoral purposes from the effects of the discovery of the precious metal in any abundance, and the consequences which must immediately follow, or which might be entailed before long, by the necessity of providing for the wants and meeting the reasonable cravings of a large population, precipitating itself upon a given portion of the country.

"But I repeat, that such curtailment of the rights proposed to be conveyed by the original orders in council, need not of itself be seriously detrimental to the interests of the stock-holder. At the same time, it would do away with what is believed to be a grievance, even if it be not so, and that by a body of which the weight and power is increasing day by day, through large accessions from without, and the rapid acquisition of wealth; a body which will always command the support of the press, because it pays for support, is more likely to be swayed and to act by impulse, and over whom the law and the government will only maintain their ascendancy in proportion as it may be clear that both the law and the government which administers it are impartial, and opposed to the protection and advancement of one class of the community in preference to another.*"

It must be evident from the foregoing, that the Imperial Parliament can alone settle the question. The great demand for land after the gold-discoveries, and the strong public outcry on the neglect of the local government to put up for auction sufficient to meet the wants of the community, at length caused a quantity to be offered for sale. The following shows the number

* Parl. Papers, 6th May, 1853, pp. 109—110.

of acres sold, and the purchase-money for the same, during the year 1852:—

Counties.	Acres.	Purchase Money.
		£
Bourke	63,102	316,545
Grant	42,472	139,145
Dalhousie	6,215	33,698
Villiers	27,050	58,492
Mornington	18,881	25,929
Normanby	3,779	7,999
Dundas	189	3,064
Evelyn	10,812	12,926
Polworth	8,544	22,375
Talbot	241	4,715
Grenville	457	5,426
Hampden	10	272
Ripon	6	20
Unnamed	1,905	3,678
Pre-emptive	74,474	76,677
Total	258,144*	711,159

Government.—On 1st July, 1851, Port Phillip district was separated from New South Wales, and erected into a colony, under the title of *Victoria*. A Legislative Council was formed similar to that of New

* Of this, in town lots, 785 acres; suburban, 15,636; country, 231,956; special lots, 9,765 acres.

† A number of respectable colonists in January, 1854, presented Lieutenant-governor Latrobe, before his retirement from Victoria, with a handsome gold vase, in testimony of their esteem for his character.

‡ *Form of Constitution proposed by the Select Committee.*—That the legislature of Victoria should consist of two chambers, to be designated respectively the House of Representatives and the senate. The senate to be wholly elective, neither the Crown nor the House of Representatives having any direct voice in, or veto upon, the election of its members. No senator to be eligible unless he be thirty years of age. The property-qualification of a senator to be a freehold of £10,000 value, or producing an income of £1,000, which qualification must be held for one year previous to his election. A senator must be a British-born subject, and a resident in the colony for five years. The qualification of an elector to the senate to be one of the following:—1st. Possessor of a freehold valued at £1,000, or producing £100 a-year of income. 2nd. Person having in possession a leasehold estate which shall have been held for one year, and shall have three years to run, and which shall confer upon him a *bona fide* interest over all charges and outgoing of £300 annually; and any tenant in occupation of any leasehold estate who shall pay the sum of £300 as the rent thereof. 3rd. Graduates of any university in the British dominions; barristers and solicitors on the roll of the supreme court; legally-qualified medical practitioners; all such persons having been resident twelve months within the colony. 4th. Officiating ministers of religion, as defined by the Act 10th Victoria, No. 16. 5th. Licensed occupants of crown-lands possessing 8,000 sheep, or 1,000 head of cattle, free from all charges and incumbrances, and having been in possession for one year. The qualification for a member of the

South Wales, its members being in part elective and part nominated; and power was given to frame its own constitution. [See act of parliament, in *Appendix*.]

In January, 1851, Earl Grey announced to Mr. Latrobe that he would receive, through the Governor-general, Sir C. Fitz-Roy, a commission as lieutenant-governor of Victoria; and his lordship added—"In conferring it on you, her Majesty's government have great pleasure in acknowledging the services which you have rendered to the community of Victoria during your long and careful superintendence of its affairs, while constituting a district of New South Wales."†

A select committee of the Legislative Council of Victoria has recommended the formation of a constitution, to consist of a governor and two elective chambers, with different qualifications;‡ but here, as in the case of New South Wales, the Imperial Parliament will have to decide the future plan of government.

Next to the settlement of the constitution and land-question, the most important topic of legislation is the nature and amount of House of Representatives to be a freehold estate of £2,000, free from all incumbrances, or of the annual value of £100, which must be verified on oath at the commencement of every new session. The qualification of an elector to the House of Representatives to be one of the following:—1st. Freeholder of £5 annual value. 2nd. Leaseholder of £10 annual value. 3rd. Householder of £10 annual value in joint occupancy. 4th. Having salaries to the amount of £100 yearly. 5th. Licensed occupants of crown-lands for pastoral purposes. 6th. All persons giving any consideration which will entitle them to occupy crown-lands for twelve months. Six months' possession prior to registration of any one of these qualifications, in the same electoral district, to be necessary. Besides the usual disqualifications of an elector, are non-payment of taxes, and, after the year 1856, being unable to read or write. The durations of the House of Representatives to be three years. The senate to consist of twenty-five members. For the purposes of election to the senate, the colony to be divided into five electoral districts. Five members of the senate to go out by rotation, according to seniority, every two years. On the occasion of the first election to the senate, those holding the lowest number of votes in each district to be the first to retire, and so in rotation according to the position of members on the poll; and in case of two or more members having an equal number of votes, the matter to be decided by lot. Of the officers of the government, two at least must have seats in the senate, and two at least must have seats in the House of Representatives. The civil-list is not completed; but it is proposed that the salary of the future governors is to be fixed at £10,000 a-year, with £5,000 to meet the expenses of the establishment. This amount of salary, it is hoped, will secure the residence in Melbourne of the governor-general of the Australias. It is also proposed to give the present

the fee for licensing persons to search and dig for gold. A committee of the Legislative Council recommended, instead of the entire abolition of the fee, as proposed by the lieutenant-governor, a graduated scale of license-fees, thus:—

One month, £1; three months, £2; six months, £3; 12 months, £5. Also, that annual licenses should (under the new constitution) have the elective franchise accorded to them; that no export duty on gold should be imposed; that small plots of garden-ground should be lent to annual licensees; that the sale of alcoholic liquors on the gold-fields should be legalised; and that sundry other minor alterations in the old law should be made. Soon after this report was submitted, the attorney-general brought a bill into council embodying some of its recommendations, and rejecting others. This bill fixes the license-fees as follows:—One month, £1; two months, £2; six months, £4; 12 months, £8. The recommendation as to the franchise has been referred to the constitution committee. The principle of giving annual licensees the use of a small portion of garden-ground has been acknowledged.

The Legislative Council admit that the gold-diggers, or rather miners, had just grounds of complaint, and that they were entitled to an equitable revision of the taxation, which was the cause of their passive resistance to the law.

The lieutenant-governor, in a despatch dated 12th September, 1853, states some aspects on both sides of the question of the license-act. Mr. Latrobe says:—

“The broad objection seems to have been, that it made no distinction between the successful or the unsuccessful adventurer; between the man who raised his shovel full of gold per week, and the man who threw away all he possessed in the world on his venture without any fruit; between the individual to whose gains it bore but a trifling proportion, and the adventurer from whose slender and wasting means it formed an important deduction; in short, that the revenue raised was not a fair per centage upon the actual yield of the gold-fields, but upon the labour employed, whether successfully or unsuccessfully. On the other hand, it was said, and with some apparent justice, that the unsuccessful miner or speculator looked for the same amount of protection, and demanded similar facilities for the prosecution of his scheme, whatever might be the result to himself individually, as the successful adventurer did: further, that the monthly charge was only at the rate of 1s. per diem.”

The miners, on the other hand, contended

officers of the government, who may be displaced by the advent of responsible government, retiring pensions of two-thirds of their present salaries; and it is further proposed that one-half salary, as pension, shall be given to those judges who serve the country ten years, or two-thirds if they serve fifteen years; and, moreover, it is said that the members of the responsible executive, which is to be, will receive, upon retiring from their offices, if they retain them for two years, two-thirds of their official salaries as

that it was an oppressive tax, levied upon a class who had no voice in its imposition.

There can be no doubt that the miners were harshly treated, and that they had done nothing to justify the language used towards them. So recently as the 3rd of May, 1853, the lieutenant-governor wrote to the secretary of state:—

“I would repeat, as I have said in earlier despatches, that the conduct and state of the people of this colony, under all its difficulties and the excitement of the times, have, all things considered, done it no discredit: on the contrary, in spite of exposure to the irruption of vicious elements from without, and of studied and systematic incitement to disorder from within, there has been far less serious disturbance of the social fabric than could ever have been anticipated.” And on the 6th July, 1853, Mr. Latrobe again tendered similar testimony to the character of the inhabitants, and adduced evidence of the “*peaceable disposition and good conduct of the mining population.*”

Finances.—The rapid increase of revenue since the formation of the colony in 1836-'7, has been shown at p. 497.

The following statement of the amount received on several items,* shows the augmentation resulting from the gold-discoveries, especially as regards the customs, notwithstanding a liberal alteration in the tariff:—

Heads of Revenue.	1850.	1852.
	£	£
Customs	76,478	318,978
Port and harbour dues	2,932	11,786
Wharfage and rent of ditto	—	3,059
Postage	6,526	12,453
Licenses	10,037	11,564
„ Gold	—	398,159
Fines and forfeitures	675	17,481
Fees of office	4,866	} 9,062
„ Commissioners' disputed boundaries	3,929	
Gold-escort fees	—	36,102
„ Treasury fee	—	4,583
Assessment on stock	12,655	14,362
Land-sales—country	—	424,813
„ town	—	279,042
Licenses for depasturing stock	—	21,424

permanent pensions. It is thought, by these means, that a great amount of talent will be attracted to contend for the high prizes offered to the successful competitors in this golden arena.—(*Melbourne Paper.*)

* The following is the tariff of customs established in Victoria, by an act passed on the 19th January, 1854:—Ale, porter, spruce, and other beer, cyder and perry, per gallon, 6d.; tobacco, cigars, and snuff, 2s. per lb.; coffee, 10s. per cwt.; spirits (all kinds), 7s. per gallon; all other goods free.

The total receipts, repayments, and balances for the year ending December, 1852, was £1,577,181, against £379,824 in the year 1851. According to the returns of the financial year ending in June, the receipts in 1852 and 1853, were :—

Receipts, Customs, &c.	1852.	1853.
Total Receipts	£ 714,679	£ 2,451,236
Of which from Customs	98,767	297,367
„ „ Land-Sales	235,264	1,138,922
„ „ Gold-Licenses	144,349	657,818

The estimated available revenue for the year ending 31st December, 1854, is £3,213,000, but this includes a sum of £200,000 unexpended balance in the treasury at the close of 1853, leaving the actual receipts about £3,000,000 sterling. Supposing the population, throughout the year, to have been about 250,000, this would show a public annual income at the rate of nearly £12 per head.

The revenue for 1854 is really enormous : the items, according to the auditor-general of the colony, Mr. Childers, are :—

“ Customs, £1,380,000 ; gold, £660,000 ; pilotage, £16,000 ; postage, £40,000 ; licenses, £107,250 ; fines and forfeitures, £71,000 ; fees of public offices, £27,450 ; rents, £3,800 ; reimbursements, £6,750 ; miscellaneous, £1,250 ; total, £2,313,500 ;—to which it is proposed to add, by transfer from the Crown revenues, £900,000 : making a grand total of £3,213,500. The probable balance on the 31st of December, 1853, is set down at £108,823 ; the total available funds, therefore, amount (by estimate) to £3,322,323. The estimated expenditure amounts to no less a sum than £3,265,761 1s. 9d., being an excess of some £52,000 over the estimated revenue ; and, taking the balance for 1853 into account, the probable balance on the 31st of December, 1854, is estimated at £56,562—about 1·7 per cent. on the total revenue. Of this expenditure, £663,058 is for police, and £258,098 more for penal establishments, petty sessions, and gaols. Public works, £1,106,925. Education, £140,000 ; post-office, £139,499 ; gold commissioners, £114,157. There are other heavy amounts.”

Such a state of affairs requires the most rigid supervision by government : nothing can justify such an extravagant expenditure.

Commerce.—The trade of Victoria, as shown at pp. 466–7, augmented extraordinarily with the gold-discoveries : its progressive value is given at p. 497. The following is a comparison of the years 1851 and 1852 :—

Years.	Great Britain.	British Colonies.		Elsewhere.	United States of America.	Foreign States.	Total.	
		New Zealand.	South Sea Islands.					
Imports.	£.	£.	£.	£.	£.	£.	£.	
	1851	748,984	977	—	238,367	122	67,987	1,056,437
	1852	1,752,216	25,499	266	2,102,297	60,363	129,101	4,069,742
Tonnage.								
	1851	54,621	—	—	67,135	746	6,457	129,426*
	1852	168,919	—	—	225,446	5,220	8,031	408,216†
Exports.	£.	£.		£.	£.	£.	£.	
	1851	1,198,894	5,392	—	217,046	1,577	—	1,422,909
	1852	6,198,433	1,775	—	1,232,236	—	19,105	7,451,549‡

There were 172 items of import in 1852 : among them may be noted :—Tea, 2,157,792 lbs. ; coffee, 7,785 cwt. ; sugar, 8,012 tons ; tobacco, 1,364,788 lbs. *Spirits.*—Brandy, 307,574 ; cordials, 1,709 ; Geneva, 128,069 ; gin, British, 35,482 ; perfumed, 615 ; rum, 418,815 ; whiskey, 63,453 ; arrack, 5,850 ; other spirits, 549 ; total of spirits, gallons, 962,116. Wine, 415,138 gallons ; beer and cyder, 826,337 gallons ; lime-juice, 2,760 gallons : flour and bread, 23,101 tons. *Grain.*—Maize, 81,182 ; malt, 2,621 ; oats,

218,577 ; barley, 32,210 ; peas, 3,016 ; wheat, 87,570 ; bran, 263,304—bushels ; rice, 433 ; corn-meal, 34 ; oatmeal, 165—tons ; pollard, 328 bushels ; butter and cheese, 782 tons ; fish, £6,500 value ; fruit, 810 tons ; confectionary, £8,461 ; cocoanuts, number, 19,320 ; fruit, dried, 810 tons ; fruit, green, 24,823 bushels ; onions, 99 ; salt, 2,402—tons ; vinegar, 52,766 gallons ; candles, 432 tons ; bricks, number, 1,055,531 ; carriages, number, 5,033 ; coals and fuel, 15,695 tons ; corks, 39,117 gross ; cradles for gold, number, 434 ; hay, 2,380 tons ; wooden houses, 593 ; watches and clocks, 573. The articles produced and

* Men, 7,735.

† Men, 22,088.

‡ Of this, £7,337,925 was the produce of Victoria.

manufactured in the United Kingdom were valued at £2,013,614; those of other British dominions, at £1,028,297; and those from foreign states, at £1,027,831. The exports produced in the colony consisted chiefly of gold and wool: the known quantity of the former was, in the years 1851-'2-'3, thus—145,128; 1,974,975; and 2,497,723 = 4,617,828 oz., irrespective of overland exports to New South Wales and Victoria.

Wool shipped years ending 5th July:—

Ports.	1852.	1853.
	lbs.	lbs.
Melbourne	9,389,967	10,248,049
Geelong	6,791,400	6,721,960
Port Fairy	723,400	1,259,725
Portland	1,752,800	3,080,560
Total	18,657,567	21,310,294

Number of bales, 66,634; 76,108. In some cases, only the number of bales has been given. These are estimated at an average weight of 280 lbs. each. The wool is estimated by the Custom-house at the

low value of 1s. 1d. per pound; which gives the total value, in 1852, £1,008,470; and in 1853, £1,154,306.

What may be the extent of the future trade of Victoria no person can predict. The imports for 1853 must have been very great: they are estimated at about £15,000,000; but on these there must be severe losses. Shipping for passengers, as well as goods, has largely augmented. During 1852, forty-two vessels, containing 15,477 immigrants, arrived from Europe: the adult females were, in number, 5,345; the adult males, 5,007; and the children, under 14 years of age, 5,125. The number of deaths, on the voyage from Europe, was 849, of which 356 occurred in four vessels, owing chiefly to over-crowding. The number of births on board was—males, 148; females, 122 = 270. Of the above numbers, England and Wales sent 5,349; Scotland, 7,127; Ireland, 3,001. The cost of conveyance, per statute adult, averaged £14 17s. 4d. each.

The vessels and immigrants which entered inwards at Melbourne, from January to June, 1853, were:—

Months.	Vessels.	Tonnage	Passengers.			
			Males.	Females.	Children.	Infants.
January	138	42,517	5,768	1,563	1,301	158
February	122	45,486	4,510	1,491	1,221	150
March	163	47,189	5,831	1,433	1,012	115
April	198	60,735	8,323	2,159	1,701	172
May	202	62,105	5,502	2,054	1,175	131
June	175	46,058	3,669	470	270	16
Total	998	304,090	33,603	9,170	6,680	742

Total passengers recorded in six months, 50,195.

The *monetary* affairs of the colony are necessarily in a state of transition, as well as the commercial and financial, and can also be now only imperfectly recorded. Bank returns since 1851—(none distinct from New South Wales prior to July 1st, 1851):—

Banks, Deposits, &c.	1851.	1852.	1853.†
Number of banks	3	5	6
Bank deposits	£ 822,254	£ 4,334,241*	£ 5,681,165
Circulation	180,058	1,327,311	1,715,991
Coin and gold in banks	310,724	3,034,538	4,871,105

During 1852, the average amount of bank-notes in circulation, was £849,434.

* Of this, nearly £700,000 deposited by government. † September, 1853.

The monetary state of the bank of Victoria, and the branches of those of *Union, Australasian, New South Wales, and Australia*, is thus shown on 30th September, 1853:—Circulation of notes, £1,715,991; deposits not bearing interest, £5,681,165; total liabilities, £7,918,188. Coin and bullion, £4,871,105; debts due bank, £2,597,587; total assets, £7,960,725.

It will be observed, that there is a great plethora of unemployed capital; and this, probably, will cause large investments in land, railway, and other speculations; and extensive building operations in Melbourne, Geelong, † and other towns.

† Among the appropriations from the public revenue, for 1853-'4, to the improvement of Geelong, the following may be noted:—*Public works and buildings*.—Grant to the corporation of Geelong, for public works, £10,000; extending the Geelong wharfs and improving approaches thereto, £30,000;

Should the present rate of revenue continue, there will undoubtedly be extraordinary improvements in the colony. The excavation of ground for docks, the cutting of a ship-canal through a narrow slip of land, so as to enable vessels to sail up to the city quays, and the improvement of wharfage-accommodation, are under discussion. A railroad to connect Melbourne with Geelong is in progress, as is also a short line to the beach at Hobson's Bay. A tram-way is proposed to the gold-diggings; and even the junction of Melbourne with Sydney by rail is talked of. An electric-telegraph is being laid down from Melbourne to the port; and this ought to be extended to Sydney and to Adelaide.

The rapid increase of wealth has as yet chiefly benefited the capital: Melbourne, indeed, looks somewhat like a city that has sprung into existence by the magic wand of an enchanter; and its wide and well laid-out streets, and a fertile surrounding country, adapt it for the growth of a great commercial city. Public buildings of magnitude and beauty* are now arising in different directions, in the room of existing structures which have a temporary character; but what the shops want in architectural adornment, they supply with wood, tinsel, and paint,† which have a fragile or gaudy effect. The solid mansions, massive structures, handsome marts, excellent churches, and fine masonry of Sydney (the result of half a century of untiring industry), are yet to be supplied. Great changes are, however, taking place: the corporation have applied to the legislature for power to borrow one million sterling, and to double the city-rates for municipal improvements; and, among other noble structures, the local government have called for plans from architects for the

towards removing the bar, £17,000; extending the gaol, £20,000; towards erecting new public offices and a court-house, £20,000; erecting a post-office, £6,000; additional buildings at the barracks, £3,000; additional police-barracks, £7,000; additional pilots' quarters, £1,000; completing cottages at the public gardens, £1,500; erecting a flag-staff, £400.

* The *Town-Hall* of Melbourne, for holding public meetings and for city business, a spacious and handsome structure, now in course of erection, would be an ornament to any city in Europe. The portion now building will have a frontage 134 feet in length by 51 in depth. About £13,000 has been expended, up to 1853, on the structure, including a portion of the clock-tower: as it now stands, the building includes the city council-chamber, fitted up in a manner superior to that of the hall of the Legislative Council, with a reporters' gallery, and also a gallery for the public. The offices of the city surveyor,

erection of a Melbourne university, at a cost of £100,000. Hotels and restaurants, of a large size, are being built at an enormous expense in every part of the town and its suburbs; but it is still without sewers, gas, or water. The rivalry between Victoria and New South Wales will be productive of good, if not carried to an extreme: each may become the basis of a great nation which will prove an honour to the parent-stock, and, it is to be hoped, a blessing to all within the sphere of their influence.

SOUTH AUSTRALIA.

This fine province, although not as yet yielding gold (see p. 447), has participated in the general improvement of the sister-colonies—partly on account of the auriferous discoveries in Victoria, and partly by reason of the energetic character of its inhabitants, the fertility and natural resources of the country, and the judicious conduct of an excellent governor—Sir H. F. Young.

In this "Supplemental Division," it will be only necessary to show the progress of the settlement since the date of the ample returns, given at pp. 343 to 364.

Population.—In 1846, the number of Europeans was 25,893: on 1st January, 1851, it was found, by census, to be 63,700, showing an increase, in five years, of 146 per cent. The proportion of the sexes was:—

Population.	Males.	Females.
Under 21 years	15,510	11,295
Married	10,664	10,842
Unmarried, above 21 years of age	9,128	5,600
Total	35,302	27,737

commissioners of sewers and of water supply, and other municipal departments, are in the basement, where there are several "strong-rooms." The council-chamber, offices of the city treasurer, town-clerk, &c., are on the first floor; and the upper story contains private residences for the town-clerk, &c. A *Mercantile Exchange*, with offices for the chamber of commerce, at a cost of £30,000 is also in progress.

† The *Highlander's Hotel* has the upper portion of the front of the house embellished with a tolerably well-executed oil-painting, thirty feet in width from left to right, and ten feet in height; the fore-ground of the picture is filled up with ten "bonnie lads and lasses," nine of whom are engaged in strathspeys, reels, and flings, while the tenth is furnishing the music of the bagpipe; in the distance are the ruins of a highland castle; in the fore-ground, a basket of fruit, a bottle of whiskey, and glass; and, on either side, the national emblem of the thistle.

According to the census of 1851, the distribution of the population was thus:—

Divisions.	Sq. Miles.	Whites.		Total.
		Males.	Females.	
City of Adelaide	8	7,684	6,893	14,577
County of Adelaide	1,159	15,976	13,471	29,447
" Hindmarsh	994	1,811	1,310	3,121
" Stuart	1,332	1,056	777	1,833
" Eyre, &c.	1,625	248	113	361
" Russell	1,530	137	37	174
" Robe	2,070	925	284	1,209
" Gawler	1,044	552	459	1,011
" Light	974	2,543	1,853	4,396
" Stanley	1,415	811	472	1,283
" Flinders	—	357	163	520
From Great Bend of Murray River to E. boundary of province	—	55	8	63
Kangaroo Island	—	55	32	87
Portion of Burra Creek	—	1,026	774	1,800
Kooringa, Redruth, and Aberdeen	—	1,428	944	2,372
Burra special survey	—	178	79	257
N. & N.W. of Stanley, N. & N.E. of Burra, S.S.	—	349	57	356
York peninsula	—	111	11	122
Total	—	35,302	27,737	62,989
Add for omissions	—	600	61	—

The white population includes 7,000 Germans: the aborigines were estimated at 3,730. The greatest increase of inhabitants was in the rural districts. Adelaide, the capital, had, in 1846, 7,413; and, in 1851, 14,577. The aggregate population dwelt in 5,873 houses of brick and stone, 3,791 of wood, and 2,369 of other materials: excepting a few hundred persons employed in mining, who dwell in excavations on the bank of the Burra Burra creek, there were, in January, 1851, about five persons to each tenement. At the end of 1851, the colonists, exclusive of aborigines, were estimated at 66,538; and, on 31st March, 1852, at 61,218, large numbers having departed for the gold-fields of New South Wales and Victoria—some by sea, others over-land. During the first quarter of 1852, 6,298 persons, chiefly males, and the best of the labouring population, left the colony *by sea*; and, in the same period, about 4,000 departed by land, making an abstraction, in a few months, of at least $\frac{1}{3}$ th of the colonists. A re-action subsequently took place; and at the end of 1852, the population stood thus:—Males—under fourteen, 14,721; above fourteen, 21,589; females—under fourteen, 14,184; above fourteen, 18,169. Total, 68,663. Aborigines, about 3,670.

The number of Europeans is now rapidly increasing, by reason of the salubrity of the climate and the means of comfort pos-

essed by the mass of the people. During 1852, the destitute persons relieved were—for periods varying between three and six months, 80; for longer than six months, 75; for the entire year 1852, only 32: total amount of pecuniary relief administered during the year, £1,989. The admissions into Adelaide hospital, for the year, were—males, 226; females, 116=342: of these, thirty-two males and one female paid fees for admission.

In 1851, the aggregate arrivals consisted of 8,464 persons, and the departures were 6,025. In 1852, the *government* immigration consisted of 2,972 English, 1,155 Scotch, 1,152 Irish=5,279: the excess of males over females was 273. Of the above, 469 were female servants, of which class many more are required in the colony. The average cost of the immigrants was £13 12s. 7d. per head; the number of vessels employed, 19, averaging 667 tons each; average voyage, 101½ days; average mortality during the passage, 3 per cent. The unassisted immigrants, in 1852, who paid their own passage, was 15,976, showing a total influx of 20,395, of whom 12,529 were males in excess of females. The total emigration from the colony, during the year, was 15,976; the excess of males departing was 11,412: thus restoring, within 1,117, the balance of the sexes. The excess of immigration over emigration was 4,419 persons. In 1853, the immigrants numbered 8,668 persons. The remittance from the colony, in 1852, to the emigration commissioners in London, was £48,523; and the bond-debt of £84,601 was finally extinguished from the land-fund.

In January, 1854, the white population numbered about 80,000. The aborigines, whose numbers were then estimated at 3,500, appear to have been, generally speaking, more carefully and humanely treated, from the very commencement of the colony, than in any of the other Australian settlements,—although some of the tribes were of a savage nature, and not very tractable: the beneficial result of this Christian policy is now being reaped by the colonists, in an almost complete cessation of hostilities with the whites, and in the valuable labour which the latter obtain from their sable brethren. Here, as in Victoria, when the European shepherds deserted the flocks for the gold-diggings, the aborigines took charge; and in one district alone, there were upwards of 200,000 sheep committed to the care of natives: some large flocks had not even one European overseer. They were also

useful as bullock-drivers, and in getting in the harvest: around the lakes they rendered valuable service to the stock-owners, by preventing the spread of bush-fires. In the Port Lincoln district, their conduct, with the exception of one petty theft, was reported to be particularly satisfactory. At a *Training Institution*, or native mission at Poonendi, to which Archdeacon Hale has praiseworthy, and with success, devoted his philanthropic efforts, the aborigines plough, sow, and reap their own ground; make bricks, cultivate a garden, and carry on sundry kinds of work with spirit and activity. The sub-protector at Korikoo, fifty miles above Moorunde on the Murray, reported that the aborigines were peaceable, well-disposed, and extremely useful to travellers to the gold-fields, with whom they kept up a brisk barter: their numbers are, however, rapidly diminishing, few children being reared; and, owing to some superstition, the offspring of a white father and a black mother is destroyed soon after its birth.

Polygamy is discountenanced by the aborigines' protectors. In February, 1853, the Bishop of Adelaide married a native couple at Poonendi,* not far from the spot where, in 1849, his lordship saw a sad scene of suffering, caused by five blacks stealing flour *mixed with arsenic*, which had purposely been left by an inhuman European settler for their destruction. This diabolical system was practised in other parts of Australia; and a considerable number of these unfortunate people must have been poisoned, as if they had been rats, by persons calling themselves Christians, who had, without purchase, occupied the lands which rightfully belonged to their victims. For such crimes, verily there will be a retribution.

Education.—A central board was formed in April, 1851, which issues to properly-qualified persons licenses to teach, under the supervision of an inspector of schools, appointed by government. Grants of money are made annually by the legislature for the encouragement of education, especially towards the establishment of elementary schools throughout the country. The number of licensed teachers, in 69 schools, under

* An interesting account of the mission, from the pen of the good bishop, will be found in the Report on the Blue-Books for 1852, under South Australia, pp. 230-3

† See Blue-Book Reports for 1852, pp. 245-257. The reports of Sir H. F. Young are complete.

the control of the central board, stood thus, in December, 1852:—

Education.	In Adelaide.	County.	Total.
Licensed Teachers	27	42	69
Scholars:			
Boys	849	983	1,832
Girls	648	803	1,451

At these seminaries, instruction is afforded in reading, writing, arithmetic, grammar, geography, history, mathematics, drawing, singing, languages (Latin, Greek, and French), and general science. Full returns are laid before government of the number of pupils engaged in the acquirement of each branch of knowledge.† The total number of schools aided by government, in 1852, was 101: the schoolmasters, 60; and the schoolmistresses, 41: of children under their tuition, there were—males, 1,355; females, 1,106 = 2,461.

The collegiate school of St. Peter's, Adelaide, incorporated, founded, and endowed in 1849, by private funds, aided by the church of England religious societies in Britain, has tended to raise the standard of education throughout the country.

Religion.—Adelaide is the episcopal seat of a bishop of the church of England, who presides over the established church in the colony, and has under his jurisdiction about 17 clergymen and 21 churches. The church of Scotland has six churches; that of Rome, eight: the Dissenters have 96 places of worship; the Lutherans, 16; the Jews, one; and the Quakers, one. Of the Dissenters, 27 chapels belong to the Wesleyans; 23 to the Primitive Methodists; 23 to the Congregationalists; 15 to the Baptists; and eight to the denomination calling themselves Christians.

Many of these places are merely school-houses; some, indeed, are private dwellings; but the number indicates there is no lack of religious ordinances. The Germans have their own pastors, and a periodical in their native language. Happily, there are no sectarian differences in the colony: men do not bring disgrace on the profession of Christianity by vilifying and persecuting each other, under the pretence of religious zeal.

Crime.—The remark of the lieutenant-governor, in his annual report for 1851, to the secretary of state, precludes the necessity of any details. Sir H. Young says—"I am happy to state that the amount of crime, as yet com-

mitted in this colony, among all classes, is so slight, that I do not feel it necessary to make any unfavourable remark whatever." Poverty and crime have, in England, a direct connection with each other: in South Australia, the temptation occasioned by the former is removed, as there is abundance of remunerative employment for all who are able to work.

Government.—Until 1851, South Australia was ruled by a lieutenant-governor and a council, composed of three official and two non-official members.

In conformity with the act of the Imperial Parliament, "for the better government of her Majesty's Australian colonies" (see *Appendix*), the lieutenant-governor of South Australia, with the advice of his council, issued an ordinance, dated the 21st of February, 1851, "to establish a Legislative Council, and to provide for the election of members to serve in the same." The council thus created, consisted of twenty-four members, one-third nominated by the Crown, and two-thirds elected by the colonists: the province was divided into sixteen electoral districts, each to return a member by the inhabitants possessed of a certain amount of freehold property, or occupying a dwelling-house, in conformity with the provisions of the imperial act.

The local legislature thus created was empowered to devise the plan for the future constitution of the settlement; and accordingly an act was passed in the session of 1853, which, like those framed in New South Wales and Victoria, now awaits the decision of the Queen and parliament. Considerable attention seems to have been given to this important subject. Two chambers of legislation are recommended; one to be elected by the people, and the other to be nominated by the Crown.

There has been no deficiency of legislation in this colony. During the administration of Captain (now Sir John) Hindmarsh, (1837-'8) ten ordinances were passed: under

* District councils are formed of ratepayers, three or more of the elected to be a quorum: they license public-houses, slaughteries, pounds, the cutting of timber, use of common lands, levy assessment for roads, &c.

† Under this enactment, 412,000 ounces of gold were brought into Adelaide, from Victoria, between 10th February, 1852, and 15th February, 1853.

‡ It has been stated to me, that Lieutenant-colonel Gawler is annoyed at the description given of his administration at pp. 209–300. I offered to insert a vindication from the ex-governor, if forwarded in time for this "Supplement;" but it has not reached

Lieutenant-colonel Gawler (1839-'40, and part of 1841), the second governor, twenty-three ordinances were enacted: under Captain (now Sir George) Grey (from 1841 to 1845), there were eighty-five ordinances; and from August, 1848, to March, 1853, the legislative measures were, in number, eighty-five: of these, thirty-eight were passed by the Legislative Council, composed of the governor and eight nominated members, and forty-seven by the existing legislature, of whom eight are nominees of the Crown, and sixteen elected by the people.

Sir H. F. Young has laudably endeavoured to divest the head of the government of the centralising authority previously possessed, and distributed the power of the executive throughout various local boards and authorities. Much business is now transacted by the municipal corporation of Adelaide, the city commissioners, the trinity or marine board, elective district boards for roads and bridges, district councils (under which the tax-payers exercise a control over their own local proceedings),* county courts for the recovery of small debts, and the trial and punishment of minor offences—all tend to the preservation of an ancient and most useful, economical, and sound policy in the administration of public affairs.

Finances.—The monetary state of the colony is now perfectly satisfactory: there is no debt,† and a surplus income is being made available for public works. Since 1839, the *ordinary* revenue (that is, money not dependent on land-sales) has increased from £19,000 to upwards of £100,000 per annum. As stated at p. 432, the financial and social crisis was, at the end of 1851 and beginning of 1852, very alarming; but the assay, purchase, and stamping of gold as ingots, by the local government, at £3 11s. per ounce, saved many from ruin; and when the price became enhanced, at Victoria and at New South Wales, beyond £3 11s., the measure‡ necessarily ceased to be operative at Adelaide.

me. Mr. S. Sidney, in his interesting and spirited work, entitled *The Three Colonies of Australia*, refers to the "injustice to Colonel Gawler," whom he describes as being "an amiable, enthusiastic, simple-minded, yet ambitious man; who accepted the theories of Mr. Wakefield as solemn, immutable truths, and the calculations of the bubble-blowing commissioners as the emanations of the highest financial ability." This is precisely the view given, in the previous pages, of the gallant officer's Australian career: it is no discredit to him to say, that he was unable to carry out an impracticable scheme, and that he broke down in the attempt; but, it may be

The ordinary revenue for the year 1853-'4 is estimated at £190,000, and the land-fund at £250,000.* "After providing for the introduction of labour, the governor has directed £5,000 to be appropriated, out of the land-fund of 1853, to city improvements; £20,000 (in addition to £20,000 in the previous year) to the central road-board; and £20,000 to the district councils of the colony. For 1854, £114,000 of the Crown moiety of the land-fund is to be placed on the general estimates. Towards roads, bridges, and other works of improvement, in 1854, it is proposed to advance the large sum of £155,000."†

The remittances to England for the introduction of labourers, between October, 1852, and May, 1853, amounted (along with a balance in hand) to £172,480.‡ A bill was passed by the local legislature, at the close of 1853, authorising the loan of £150,000 for the construction of a railway from the city to the port of Adelaide—a distance of seven miles: the gauge adopted for the line is five feet three inches.

There is abundance of employment on the above works§ for a large number of artisans and labourers, who will find employment without the loss of a day's hire.

The total quantity of land surveyed and sold to January, 1854, was 995,000 acres. During the year ending 31st December, 1852, there were sold, 72 town-lots, comprising 18 acres, 73 suburban—6,150 acres; and 953 lots of country land, 80,504 acres=86,672 acres, which yielded to government, £99,081. Of the above, 33,911 acres were disposed of by auction, and the remainder at the fixed price of 20s. per acre. The quantity sold, in 1852, exceeded, by 4,083 acres, the sales of 1851, and, by 21,723 acres, those of

added, not before he had sacrificed a considerable portion of his private fortune, and been made, as Mr. Sidney says, "the scapegoat for the criminal absurdities of the colonizing theorists in London." Hospitality, charity, truthfulness, and kindly sympathy for the poorer classes of society, rendered Colonel Gawler respected and beloved in South Australia; and, when the errors of the period are forgotten, his name will be held in grateful remembrance by the colonists.

* The sums received of ordinary revenue for the years 1851-'2, were—Customs, £93,321; £72,514: port and harbour dues, £4,094; £273: rents (exclusive of land), £1,620; £768: licenses, £7,766; £6,191: taxes, £1,892; £449: postage, £6,805; £7,270: fines and forfeitures, £5,422; £3,753: fees of office, £5,213; £3,837: sale of government property, £185; £567: reimbursements, £508; £639: miscellaneous receipts, £217; £3,620: interest, exchange, &c., £2,437: total, £127,046; £102,325.

Land Revenue.—Land sales, £91,272; £93,365: land revenue, £3,092; £17,438: government pro-

perty, £4; £26: reimbursements, £139; £24: miscellaneous, £719; £192.

1850: this was partly owing to the governor putting up small lots for sale, whereby the fortunate gold-diggers were enabled to invest their earnings instead of spending them in riotous living, extravagance, and debauchery—a system which was engendered and encouraged by the Melbourne government withholding land from public auction, or only granting it for sale in quantities beyond the means of the humbler classes. Of the gold brought into Adelaide, £230,000 was paid to the government for waste-lands.

The territorial revenue for the year ending 30th June, 1853, amounted to £245,000, and exceeded, by £6,498, the same source of income in New South Wales for 1852. The quantity of land sold, in 1853, was 204,933 acres, which realised £297,515. It appears that, up to 1852, there had been leased, for 14 years, 14,000 square miles of the territory, and that 1,143 square miles were held on leases renewable every year.

The banking state of South Australia has materially improved, and in July, 1853, was on a sound basis, as shown by the banks:—Deposits, £1,439,455; notes in circulation, £226,633; bills under discount and other, £331,913; coin and bullion, £1,532,521. The operations of the bullion act and escort brought £1,500,000 sterling worth of gold into the colony. In 1853, the quantity brought overland from Victoria, was 99,113 ounces, valued at £390,000.

Commerce.—The progress of trade, to the year 1849, is fully shown at pp. 357-8; and, as stated at p. 352, discriminative or differential duties were abolished in 1849. Equal and very moderate rates are levied on the products of every country. In 1848-'9, the levy of royalties on metallic ores were discontinued.

The trade of the colony has been rapidly

performed, in conformity with an address to that effect from the Legislative Council, the governor has agreed to place on the estimates a sum of £6,000, for three years, to be given as a premium, in sums of £500 per month, to any company or private individual who, being under contract with the home government, shall deliver mails, *via* the Cape of Good Hope, at Port Adelaide, within sixty-eight days of departure from Great Britain, provided that one-sixth of the reward shall be deducted as a fine if the length of the voyage exceeds the prescribed time. In conformity with recommendations from England, there is to be an uniform charge of sixpence for all foreign letters, pre-paid by stamps.

† *Australian Gazette*.

‡ It is proposed to borrow £500,000, to be secured on the colonial revenue; one-third to be applied in aid of the emigration-fund, and the remainder towards the construction of railways.

developed: the returns, exclusive of gold-dust, for years ending December, show:—

Years.	Value of		Ships Inwards.
	Imports.	Exports.	
	£	£	Tons.
1849	599,518	402,853	80,623
1850	845,572	570,816	86,583
1851	798,828	602,086	74,757
1852	798,811	1,787,741	101,666

The exports are thus set forth by a committee of the chamber of commerce, at Adelaide, for the years ending 25th June 1852-'3:—

1852.—I. Produce of the colony:—Wool, 12,608 bales (3,566,994 lbs.), value, £141,443; copper, 43,704 cwt., £179,632; regulus, 583 tons, £17,690; copper ore, 10,074 $\frac{3}{4}$ tons, £164,346; lead ore, 49 tons, £520; grain, 10,338 qrs., £18,152; flour, 5,160 tons, £89,347; bran and pollard, 880 $\frac{1}{2}$ tons, £5,527; hay, 232 tons, £701; other farm produce, £6,591; tallow, 1,462 cwt., £2,075; hides, horns, bones, &c., £1,113; animals, £4,080; sundries, £8,844: total exports, produce of the colony, £647,063. II. Imports re-exported, £174,064: total export of merchandise, £821,127. III. Gold-dust and bullion, manifested, £123,175: grand total, £944,302.

1853.—I. Produce of the colony:—Wool, 11,360 bales, (3,702,952 lbs.), value, £189,657; copper, 28,144 $\frac{1}{2}$ cwt., £113,893; regulus, 34 tons, £1,360; copper ore, 4,793 $\frac{3}{4}$ tons, £95,147; lead ore, 20 $\frac{1}{2}$ tons, £291; grain, 9,018 qrs., £30,993; flour, 6,233 $\frac{1}{2}$ tons, £166,881; bran and pollard, 1,549 $\frac{1}{2}$ tons, £16,399; hay, 1,309 $\frac{1}{4}$ tons, £13,278; other farm produce, £13,629; tallow, 180 cwt., £250; hides, horns, bones, &c., £316; animals, £4,170; sundries, £5,704: total exports, produce of the colony, £651,970. II. Imports re-exported, £101,104: total exports of merchandise, £753,074. III. Gold-dust and bullion, manifested, £1,487,283: grand total, £2,240,358. Besides gold-dust and bullion not manifested, the quantities of which cannot be ascertained.*

Mining operations, which are of the highest importance to the colony, have been temporarily impeded by the migration of the miners to the gold-fields of Victoria, as stated at p. 452: the works

* The staple products of the colony exported in 1853, were in value about £700,000, of which the "bread-stuffs" amounted to £271,676, although the quantity of land under cultivation is only about 52,000 acres; wheat, 8,000; barley, 3,200; oats, 995; potatoes and gardens, 2,785—acres.

† From the commencement of this mine, to 1852, there have been raised 87,839 tons of ore, at an expenditure of upwards of £900,000, and 17 dividends have been paid, amounting to £308,000, or £125 on each £5 share, which is valued at about £150. Pickett, the discoverer of the Burra-Burra (which has enriched many individuals), was found in November, 1851, dead in a vacant hut at Hallett's Springs, three miles from Koorunga: he was last

were, therefore, for a time at a stand-still, but have now resumed pretty full activity: the celebrated *Burra-Burra*† still keeping the lead. The £5 share sells for £160.

Little has yet been done by the other companies named at p. 359. The *Australian Mining Company* has a property of 22,000 acres of land, with machinery, &c., for working the mineral deposits, which are within seven miles of the river Murray. Notwithstanding the paralysing effects of the gold-discoveries, a quantity of copper has been raised to meet the colonial disbursement.

The *English and Australian Copper Company* have had 7,280 tons of ore shipped for England, at Koorunga: the quantity smelted for the year ending 31st March, 1852, was 1,823 tons, or 35 per week. The company obtained a cargo of mules from Monte Video, for the conveyance of the ore to Port Wakefield, at the head of Gulf St. Vincent, whence it is shipped for Britain. To economise space, the following interesting subject is given in small type.

Among other valuable accessories for the advancement of South Australia, not the least important is the opening of the *Murray River*. This extensive stream—the Mississippi of Australia—was discovered by the enterprise and gallant daring of Captain Sturt,‡ in 1829, as stated at p. 40. It appears to be the great artery of an immense tract of country, westward of the Blue Mountain range, extending through about 10 degrees of latitude, and probably 15 degrees of longitude, and is formed from the waters of several rivers, of which the Darling (swollen by the Macquaries, Bogan, Castlereagh, and other streams), Lachlan, and Murrumbidgee, with their several confluents, are the chief known tributaries. The surface drained by these is estimated at 480,000 square miles.

For twenty years this noble aqueduct, flowing through the rich and valuable back-settlements of New South Wales and Victoria, was utterly neglected as a means of transit for the produce and wants of the numerous graziers and farmers who have been gradually collecting along its banks. The reports of Sturt, Mitchell, and Hume,§ were neglected, and the drowning of Sir John Jeffcott, and

seen there in a state of intoxication, and, in that condition, and when nearly naked, fell into the fire; his lifeless body was found by a boy ten years old, who accidentally strayed into the hut in search of some twine.

‡ This modest, amiable, and distinguished Australian explorer, who for several years creditably filled the arduous office of secretary to South Australia, has received a pension of £600 per annum from that government—a small and tardily-bestowed reward for invaluable services to all Australia and to geographical research.

§ The upper part of the river, previous to its junction with the Murrumbidgee, is frequently called after the name of this enterprising traveller.

several of his companions, in attempting to pass through the narrow, sand-barred, and heavy-surfed embouchure of the Murray into the ocean at Encounter Bay (*see* p. 313), seems for a time to have checked all further attempts at examining the seaward portion of this great river, excepting the hazardous feat of a Captain Pullen, who crossed the bar in a barque of *thirty* tons' burthen, which was left to rot in the river.

Lieutenant-governor Young, who deserves high credit for the zeal, judgment, and perseverance evinced in endeavouring to open up the *Murray* to British enterprise, thus explains* the circumstances which have delayed this great object:—

"That this extensive navigability of the river Murray should have remained so long unserviceable to the continent of Australia, and especially to South Australia, within whose territory flow so many hundred miles of its course to its final exit on the Southern Ocean, requires some explanation to persons ignorant, perhaps, of the past and present condition of this infant colony; and, figuring only to their own imagination how the labour, wealth, art, science, and enterprise, teeming in Great Britain, would, without loss of time, have been engaged in improving this gigantic 'water privilege.' The memorable and important discovery of the river Murray, by Sturt, and the arduous and courageous exploration of it which his enterprise first carried to the ocean, and his fortitude retraced, despite the uncertainty of ever safely returning through a wilderness peopled with unknown tribes, no doubt gave a powerful incitement to the subsequent colonisation of South Australia.

"In the early days, however, of the plantation of this colony, the impracticability of the sea-mouth of the river Murray; its shifting and narrow channel; its fearful surf and heavy rollers; its unmitigated exposure to the swell of the great South Ocean; the disappointments and fatal accidents which attended all attempts, save one, to enter it from the sea; the ignorance then felt of the power and dispositions of the aborigines on its banks; the supposed insufficient depth of water through Lake Alexandrina; the absence, in those days, of steamers of light draught of water, adapted to the navigation of rivers; the then scanty number of colonists who found for their immediate purposes a more than sufficient extent of agricultural and grazing land adjacent to Port Adelaide in Gulf St. Vincent; all these causes sufficed to render the solitary instance of the success of Captain Pullen, in 1841 (in entering the river from the sea, in a little cutter of thirty tons, which has never made its exit again) unproductive of further efforts in South Australia at that time, to penetrate the interior of New Holland from the sea by the navigation of the Murray. Nor was this great object, whilst left unachieved for all practical purposes by enterprise from hence, likely to engage the attention of the less interested colonists of New South Wales. Indeed, the squatters on the Australian continent—those useful pioneers of colonisation—were otherwise profitably employed. The occupation of new country, which led to the settlement of Port Phillip, in 1837, and of Twofold Bay, in 1839, had been carried, in 1840, 300 miles to the north beyond and behind Moreton Bay, whilst to the south and west, sheep and cattle stations extended beyond Port Phillip to the very confines of South Australia; thus colonisa-

tion, and the attendant investments of commercial speculation, were chiefly directed to these outlets to the sea along the eastern side of the ridge of mountains parallel to the Pacific, between the 26th and 32nd degrees of latitude."

In September and October, 1850, Sir Henry Young explored the *Murray*, for a distance of 600 miles to its junction with the river; and the following is an abstract of the observations recorded by the governor on this occasion:—

"From the Rufus to the Darling seventy soundings were taken: the deepest three and a-half fathoms; the shallowest eight feet; the soundings for the most part gave two fathoms. The shallow water was over a sand-bank, near Moorna, about forty miles before coming to the Darling.

"On each side of this sand-bank, at the lowest time of water—viz., in June, three to four feet were said to prevail. At the Darling the flood-mark on the trees was 11 feet high; at its junction with the Murray it is 100 yards wide, and two fathoms deep. There is a substantial new ferry punt across the Darling, about one mile up the river. It is worked by a rope, and is capable of crossing a loaded dray and its team. The Murray, at the Darling, is 209 yards wide, and this width is reported to be not materially altered onwards to the Murrumbidgee and Lachlan. The Rufus Creek rose ten inches in seven days. The flood-mark on the trees was nine feet high. The creek is nine miles in length; depth, varying from eight feet to two feet, the water shallowing near its entrance into the lake Victoria. The lake is about fourteen miles by six miles, with three feet water in the middle. From the Rufus to Moorundee, returning, 150 soundings were taken: the deepest, four fathoms; the shallowest, one and a-half fathoms; the usual depth, two fathoms. From Moorundee to Point Pomond, in Lake Alexandrina, 63 soundings were taken; the deepest, $12\frac{3}{4}$ fathoms; the shallowest, one and a-half fathoms. Of these extremes, but one of each depth was met with; three, four, five, six, seven, and eight fathoms, being much more frequent. The deep water was off Thompson's station, 30 miles before reaching Wellington, in a line with a granite rock in the river, about 20 feet long, four feet high above water, having one and a-half fathoms close alongside the rock. The rock is said to be at all times visible. The deep water is on the south side of the river. Lake Alexandrina, from Point Pomond to Point Sturt, is 25 miles across, with a channel of one and a-half fathoms. From Point Sturt to the Goolwa the distance is 15 miles, with a breadth of water generally exceeding half-a-mile, a channel of 300 yards, and a depth of one and a-half fathoms. Close to the Goolwa old police station-house, alongside of a limestone formation projecting into the water, 90 feet of water are obtained. This is a good site for the contemplated jetty; and the basin here, sheltered by Hindmarsh Island, is about as spacious as the commodious harbour at the north arm of of the Port Adelaide Creek.

"The distance from the Goolwa to the Darling is about 680 miles; there are no falls or rapids, or other impediments of any kind, except the insignificant ones already alluded to; and throughout the entire distance there is a channel, most amply deep and wide, for steamers of greater draught of water than that of the limit prescribed by the legislature of South Australia to the competitors for the premium for the successful navigation of the river Murray from the Goolwa to the Darling. The country from

* In a letter, dated 29th June, 1852.

the Goolwa to the Darling has no vacant run with river frontage for stock. There is a stock-holder claimant for every part of this extensive country along the river. Traces of cattle or sheep are constantly visible; and wherever the animals were met with, they seemed in excellent condition. The alluvial land varies in depth from half-a-mile to three miles on the border of the river. There is abundance of timber, and particularly fine above Moorundee. It may safely be conjectured that the necessities of a denser population would soon induce a resort to expedients for preventing the inundation of the river and its tributary creeks, and for raising and retaining supplies of water for irrigation of both the alluvial and sandy land along the extensive course of this noble river. I was informed that a vast tract of pastoral land, stretching from the back of the Burraburra range of hills to the north-west bend, and onwards to Laidley's Ponds on the Darling, hitherto only used in portions adjacent to the river, is now likely to be occupied for pastoral purposes over its entire inland space, because of the recent discovery of good water beneath the surface.

"The climate on the river, in September and October, was sharply cold in the early morning, cool and pleasant after sunset, and fiercely hot at mid-day in the scrub and on the water. The natives were seen in great numbers—unoffending, useful, and obliging. At every station some few were engaged in the service of the stock-holders. Six natives rowed from Wellington to the Darling, and from the Darling to the Goolwa, nearly 1,400 miles. Throughout the expedition I was much indebted to the settlers for their great kindness and hospitality.

"(Signed) H. E. F. YOUNG.

"Government House, Adelaide, Oct. 25, 1850."

The practicability of a steamer plying between Lake Alexandrina (which is merely an expansion of the Murray instead of its having several exits), and the Darling being thus ascertained, the next step was to examine the depth of water in Upper Murray to *Albury*, situated at the base of the last range of hills on the New South Wales side of the Victoria frontier (where the flat country commences), and about 400 miles S.W. of Sydney. *Albury* is a thriving village, with 500 or 600 inhabitants, possesses its church, steam-mill, stores, inns, &c., and is becoming the centre of an active inland trade. From this place, an experienced traveller, named Gerstäcker, launched a gum-tree canoe, drawing 10 to 11 inches, in May, 1851, when the river was at its lowest point, "a decent shower" not having fallen for 16 months. He found a copious stream of water, but its channel was obstructed, particularly in the upper course, by *snags*, or fallen timber.

After the union of the Hume, or Upper Murray, with the Murrumbidgee, when it becomes the proper Murray, the river was, with some exceptions, ascertained to be free from the dangerous obstacles of *snags* and banks; below the Darling junction, few were to be seen, and no such short bends as exist higher up: there was plenty of "sea-room" in mid-channel for steamers of considerable size, although sand-bars occurred nearly as far down as the north-west bend.

Mr. Gerstäcker, after adverting to the clearing the bed and removing the *snags*, with the aid of ropes and saws, proceeds to say—"That inland steam-navigation would create an entirely new zeal in the population of the surrounding districts; it would prompt them to make new efforts, and to commence

experimental cultivation, the results of which may be most successful, and the means of drawing hundreds and thousands of settlers to the borders of the Murray and its tributaries. At present, comparatively few persons feel strong inclination to remain in districts so completely isolated from the known world, and with which there are no means of communication except by long and tedious journeys and bullock drays. A water-communication, once opened, would produce a considerable return, even from the passengers. Of one thing I am sure—if this river, under the same circumstances, and labouring under the same difficulties, had been found intersecting a colony in the United States, the Americans would have had before this time not merely one but ten steamers running on it; and, if they had to give it up at last, they would at least be able to give proof of their full acquaintance with the difficulties, and a sufficient reason for the relinquishment. I have fully admitted, that the removal of the *snags* is a work of difficulty; but it does not represent a thousandth part of the obstacles which have been overcome in the States. Red River, which divides Texas and Arkansas, and empties itself in the Mississippi, was blocked up by layers of fallen trees called 'raft,' for nearly 40 miles. Not only was the current impeded by *snags*, but the whole river was filled up with immense trees in such quantities, that even other trees (young cottonwoods), grew on the top of them, and forced the current of a large and splendid stream to work for itself another channel through the low lands on the southern shore, by which means two lakes were formed, one called Soda, and the other Clear Lake. Through this prodigious raft the Americans, with immense labour and perseverance, have cut a channel for steamers; and though it filled up several times during my sojourn in the United States, the channel was again and again renewed, and eventually kept clear. It will be admitted, therefore, that the possibility of steam-boat navigation on the Murray need not be doubted; for, except in an extraordinary dry season like the last, even the upper part of the Hume, as far as *Albury*, usually contains, I am told, during eight months of the year, plenty of water to float boats drawing four or five feet. Difficulties have certainly to be overcome; but there exist no real or insurmountable hindrance to the accomplishment of this important object."

While these explorations were taking place, a Scotchman, with the marked intelligence and perseverance which distinguishes his countrymen, was preparing to turn them to a practical account.

In 1848, a Captain Cadell, (who had unavailingly offered to explore the Amazon) while commanding a merchant ship in the Australian trade, had his attention directed to the possibility of navigating the Murray; he carefully sounded Lake Victoria, and became convinced of its waters being available for commerce. Nothing further was then done, Mr. Cadell being obliged to return to Britain on mercantile business; but on revisiting Australia in 1851, he re-examined the sea-mouth of the Murray, and was nearly drowned by the upsetting of his boat in the terrific surf which breaks on the bar. On entering into correspondence with the Lieutenant-governor, Sir H. F. Young, that far-seeing officer entered at once into the views of Mr. Cadell, and it was resolved to procure a suitable steamer, drawing a very small draught of water, to attempt the navigation of the stream. Such a vessel could not be

brought round the Cape of Good Hope. Undeterred by this difficulty, Captain Cadell resolved to turn to advantage the knowledge acquired some years before in the engine-manufacture and ship-building-yard on the Clyde, of the justly celebrated and liberal Robert Napier. He, therefore, proceeded to Sydney, planned and superintended the construction of his steamer and her machinery, which he named the *Lady Augusta*, and also directed the building of her tender (the *Eureka*), at Goolwa. While these vessels were preparing, Cadell resolved to examine the Murray in a small boat of light frame-work, covered with stout canvas. With these materials packed on one horse, and mounted himself on another, this persevering man left Melbourne, reached the Bendigo gold-diggings, picked up a volunteer crew, and started for a bend of the Upper Murray, named *Swan Hill*, upwards of 100 miles from Bendigo, a journey in which much suffering was endured from "bushing" it in an inclement, rainy season. At Swan Hill, Cadell put together his frail bark, named the *Forerunner*; but the night previous to its launch, a tremendous storm blew down the roof of the outhouse, under the lee of which the craft was got ready, and the *Forerunner* was utterly smashed. Plenty of wood was at hand; another frame was constructed; and the brave pioneer, with his crew of gold-diggers, navigated some 1,300 miles of the sinuous and deep waters of this, to them, unknown river; and, after 25 days' toil, safely reached the Goolwa.

The *Lady Augusta* arrived in South Australia safe from Sydney; and, on the 16th of August, 1853, Cadell, watching a favourable opportunity of wind and wave, after six weeks' unremitting tidal observations, and marking out in whale-boats the safest channel, piloted his tiny steamer* over the formidable breakers from the Pacific into the Goolwa. Here the governor, and a party of pleasure, were received on board, and the whole—numbering in all 44 persons—proceeded across Lake Alexandrina, the channel of which had been previously buoyed by conspicuous and permanent beacons by the aborigines, under the superintendence of their humane sub-protector, Mr. Mason. The distance of 38 miles was performed at the rate of eight miles an hour, against wind and tide—the *Lady Augusta* towing a tender larger than herself.

The weather was fine, and the exploratory trip most agreeable; the voyagers being surprised at the depth of water, the variety of the scenery, and the numerous European stock-stations along the banks of this hitherto almost unknown river.

The land about Point Pomond is infested by venomous black snakes, five or six feet long. They have been driven down by the sheep and cattle into the extreme point, where the swamps prevent the animals feeding. There they breed to such an extent, that as many as 20 have been shot in a single day. Their chief food is frogs, with an occasional rat or mouse by way of variety.

* The tonnage of the *Lady Augusta* is, by the old measurement, 72 tons; by the new, 19. The reason of this great discrepancy between the old and new measurements is, that the entire measuring portion of the vessel is occupied by her boilers and machinery. The boilers are seated, one before, the other abaft, the engines, to insure an equal distribution of weight over a large portion of the hull, thus enabling her to accomplish the considerable sea voyage from Sydney; it was one of the many difficulties and dis-

advantages that the building of her, so many miles from the field of her operations, entailed. The following are the principal dimensions of the *Lady Augusta*:—Extreme length, 105 feet; extreme beam, 20 feet 6 inches; beam between the paddle-boxes, 12 feet 6 inches; depth of hold, 5 feet 6 inches; engines, horizontal, of 20-horse each, and two cylindrical boilers. A covering on the *Lady Augusta's* deck extends fore and aft. It is seven feet in height, and forms a promenade.

On the peninsula between Lake Victoria and Lake Albert, and nearly opposite Point Pomond, is a neat white house, built on the property of Mr. Neil Malcolm, a wealthy Scottish gentleman, who possesses a special survey of 4,000 acres, comprising about 12 miles of water frontage. Nine miles above Point Pomond is the entrance of the Murray. The river is there only 200 yards wide, but it expands considerably a little higher up. The view on the right-hand is very pleasing, and has rather an English appearance—a rising ground, with occasional clumps of fir-trees, slopes gently down to the water-side. The southern road overland, from Adelaide to Melbourne, runs near the river, and numerous passing drags give life to the scene. The land is a native reserve, and is of good quality.

At Wellington, a party assembled at the inn, to greet with tumultuous huzzas the novel sight, as did about 100 persons (white and black) at the sheep-station of Messrs. Wark and Cooke, whose "run" comprises 24 miles of river frontage, and extends six miles inland, where there is an immense pine-forest, which supplies good six-inch planks, and plenty of timber for building.

Higher up (24 miles from Wellington) is a granite rock, which stretches almost half across the Murray, forming, it is supposed, part of the same mass which may be traced at intervals of two or three miles, running in nearly a half-circle to a large granite reef on the sea-coast, about 40 miles north-east of Rivoli Bay. In nine or ten places it juts out of the ground to a considerable height. The soundings in the river between the granitic mass and the bank gave 13 fathoms. Ten miles further up is an island, one mile by 200 yards broad; good land, covered with gum-trees, and subject to inundation at one corner only.

The scenery, as in most large rivers in the lower portion of their course is, in general, flat and uninteresting; but occasionally there are spots of marked beauty. At Messrs. Keane and Orr's station, the view is thus described:—"We had first to ascend a steep cliff of red sand about 50 feet high, which brought us to an extensive undulating table-land, clothed with abundant pasture, and studded with the gayest flowering shrubs. No English pleasure-ground could surpass such an Australian shrubbery; indeed, it is almost impossible to fancy that nature, in its adornment, has received no assistance from art, so tastefully are the colours blended, and so gracefully do the long creepers mingle their white blossoms with the rainbow-tints among which they tumble and twine in all the gay luxuriance of the bush."

It was formerly supposed that the soil in the valley of the Murray would be found unfit for cultivation; but now it is stated, that nearly the whole of the scrubby land, through which the river passes, might be converted into fruitful corn-fields. About the Darling junction there are some vast meadows, par-

tially inundated, which, if drained, would make valuable pasturages: the worst land is within the South Australian boundary. For 30 miles below, and 25 miles above Swan Hill, the river winds through large reedy flats, and has the appearance of a wide canal full to the brim; and in many places, the immediate banks are here destitute of trees: some are seen in the distance; in other parts there is abundance of excellent timber at the water's edge, which will give employment to numerous sawyers, as rafts can be floated down to the Goolwa.

On Saturday, August 27, the voyage was continued throughout the night—the engines at full speed, although the weather was dark and stormy. Mr. Mason, and the aborigines under his kind care, were good pilots, and the broad river was clearly distinguishable. Innumerable water-fowl were met with, including the goose, duck, diver, pelican, and stately black swan, with many others not known. Every new "reach" passed seemed more lovely than the last; one, seven miles in length, was bounded by a perfect avenue of tall trees. "Some have on one side sandstone rocks, varying in height from 50 to 200 feet, and on the other side extensive meadows, studded with clumps of gum and fir-trees, and absolutely yellow, with a flowering plant resembling groundsel. The rocks are as perpendicular as walls, crowned, and sometimes ornamented at the base, with hardy trees. The yellow flower is a useless weed, but it indicates good land and the absence of salt. In many places where the shore is lined with reeds, the back land, to the extent of section after section, is covered with this auspicious plant."

The steamer at length reached *Swan Hill*, where there is government reserve and township called Castle Donnington, which occupies, as slightly rising ground, the only eminence to be seen for miles around. Here there is a clerk of the peace, surgeon, a few constables, a comfortable inn, a store, and, among artisans and workmen, a brickmaker and smith. Petty sessions have been established, and there is to be a resident magistrate. The elements of civilised life are therefore provided; but, as yet, the prices of necessaries are high. When the *Lady Augusta* steamer stopped here, a bottle of beer cost 6s.; a glass of whiskey, 2s., at the inn: and, at the store, a pair of cotton socks, worth 6d., cost 2s. 6d.; letter-paper, 5s. a quire; tape, 1s. per yard; needles, 6d. each; and flour, 2s. a-pound. Wages were proportionably high. The police received 8s. a-day, and bullock-drivers, 35s. a-week; both being provided with board and lodging; and the former with two suits of clothing a-year.

The European colonists now settling along the Murray will ultimately change its monotony to one of picturesque scenery. This change has already commenced: the Australian correspondent of the *London Times* notices the fact thus:—"The passage of the little steamer past the stations on the banks might well be considered a great event. Captain Cadell and his companions were everywhere most hospitably received, and entertained with the good cheer which is better and more plentiful hundreds of miles in the interior than in the crowded capitals. The luxuriance and variety of the vegetables and fruits of the settlers' gardens are recorded with grateful emphasis: thus—'Mr. Cole's salads' have acquired, on the Murray, 'a world-wide celebrity'; the *Lady Augusta* testifies unanimately to their excellence, and 'their hospitable dispenser may confidently challenge the bush to produce crisper lettuces,

richer eggs and cream, or bottled condiments more judiciously compounded.' At 'Bombany, on the Victoria side, is Mr. Grant's station. He lives there, with his family, in a very comfortable bush residence, and has a garden of two acres, in which there are peas, potatoes, greens of various sorts, lettuces, radishes, and several other esculents, all looking well and strong.' Another settler's garden is thus described:—"Mr. Beveridge's garden is the most beautiful I have seen on the Murray. It is laid out with much taste, the acacias being trained into hedges, and the willows into bowers, while an artificial canal, leading from a "billebong," gives the whole a cool and pleasing appearance. Our table was liberally supplied with new potatoes, carrots, turnips, greens, lettuces, and mint; while the well-tended beds displayed, in various stages of advancement, peas, garlic, onions, cauliflowers, and asparagus, besides more herbs than I can enumerate, and all doing well. The garden also contains vines, plum-trees, and peach-trees. There is a patch of healthy-looking wheat; and Mr. Beveridge says he has every year abundance of melons and pumpkins.' Never has an exploring expedition opened up a thousand miles of an unknown river more pleasantly. Delicious salads, imitations of champagne suppers, bonfires on shore at dusk, and the evening 'again finished by a dance,' as if partners and polkas were nothing unusual, gave the enterprise something of the air of a prolonged picnic."

Leaving *Swan Hill*, the steamer proceeded to *Campbell's* station, 100 miles further up the stream, distant from the Goolwa about 1,500, and from Melbourne 210 miles. The average rate of steaming up the river and back was $6\frac{1}{2}$ miles per hour: the average rate of travelling, including all stoppages, 62 miles a-day. The *Eureka* brought down valuable cargoes of wool, tallow, and skins, collected from some of the fifty sheep-stations situated along the route, and the traffic is now regularly established. It is stated in an Australian journal, that "the officers and sailors of the *Lady Augusta*, are men who have seen the rivers of each quarter of the world, and they compare the Murray with some of the finest. One it reminds of the St. Lawrence at and above Quebec; another terms it a miniature Mississippi; a third likens it to the Hooghly, adding, that it is broader than either the Ganges or the Jumna above their point of junction; a Chinese mariner says it resembles the Tigris at Whampoa; and one of the officers, who has recently been at California, states that it is broader than the Sacramento. The water of the Murray, like that of the Ganges, is generally rather thick and muddy, especially when, as at present, the stream is rising. This is said to be chiefly caused by its admixture with the Darling. It looks, in a tumbler, as if it had a little milk or chalk in it, but settles down in a few hours and becomes perfectly bright, leaving a considerable sediment, which may be described as something between Fuller's earth and pipeclay, feeling soft and greasy in the fingers. It is excellent both for drinking and washing.

There will, doubtless, be ultimately a large traffic on the Murray. On his second trip, Captain Cadell brought down 606 bales of wool, of which 349 were from the New South Wales territory, and 257 from that of Victoria.

It is expected that a great extent of good arable soil will be available in the valley of the Murrumbidgee: within the limits of the colony of South

Australia, contiguous to Port Elliott, or to the navigable waters of the Murray, there are 735,651 acres of good land surveyed, and now open to purchasers from the Crown, at the rate of 20s. per acre. Immense tracts contiguous to the great stream and its tributaries are adapted for the rearing of horned cattle, sheep, and horses; indeed, ere long, this region will probably become, with a cheap and ready transit to the ocean, the most lucrative pastoral country in the world. For at least seven months* in the year there is now a navigable channel through one of the finest portions of Australia; the rising of the Murray, in June, will become to our southern brethren of as much importance for traffic, as is that of the Nile to the Egyptians for agriculture.†

Sir H. E. F. Young, who again ascended the Murray in August, 1853, states several facts connected with this important stream in his despatches to the Duke of Newcastle, her majesty's secretary of state. The following is an abstract of the principal points:—After stating that the steamer *Eureka* reached *Gana Warrah*, 150 miles beyond Swan Hill, Sir Henry proceeds—"At this point the depth of water was three fathoms, and the breadth about 200 yards. The branch of the Murray, called the Wakool, was ascended for a distance of sixty miles, and was found to average forty yards in width; and the soundings were from two-and-a-half to upwards of five fathoms. Near Poon Boon, on the Wakool, there is a reef of sandstone, but leaving a channel just large enough to admit the two vessels to pass abreast in six-foot water; after which the water assumes its average depth. This reef is capable of easy removal. The total extent of the navigation of the Murray proper, accomplished on this voyage, was 1,450 miles; that of its branch, the Wakool, sixty miles in addition. It is to be noted, that very generally the river is so winding, that the distance, in a direct line by land, may be computed at less than half the distance by water. On the whole I am enabled to give it as my opinion, that the Murray proper is navigable from the Goolwa to Albury, that is, for a space of 1,900 miles. Its branches and tributaries are the Wakool, the Loddon, the Campaspe, the Goulburn, the Kyaltie or Edward, the Tuppul, and the Billibong. The Murrumbidgee, from its junction with the Murray, has a navigable course of 700 miles to Gundagai. The Darling is navigable in seasons of flood."

The colonial legislature has made a grant to Captain Cadell of £4,000; and contracted with him for a continuance of the transit during the six or eight months, when there is an abundance of water for his steamers; and it is expected, that by means of flat boats he will be able to extend the navigation along the Darling and the Murrumbidgee into nearly the centre of the pastoral districts of New South Wales.

In consequence of the difficulty of entering the Murray from seaward, a rail or rather tramway is in progress, at a cost of £21,000, between the township of Goolwa, *inside* the river-mouth, and Port Elliott, on the southern coast of the colony, in lat. 35° 32' 45" south, long. 138° 49' 15" east, six miles from Rosetta Head, *Encounter Bay*: by this communication (about seven miles in length), the produce of the back-settlements (wool, tallow, hides, and grain,

and probably minerals) of the three colonies may be shipped direct for Europe.

Ever since the colony was founded, coasters have been in the habit of entering and departing from Port Elliott at all seasons of the year: first-rate moorings from Woolwich dock-yard are now laid down for large vessels inside a breakwater; but the holding-ground is good outside; and with the aid of the brilliant revolving *Sturt Light* on Cape Wiloughby, Kangaroo Island, which has a total elevation of 241 feet, and is visible at a distance of six nautical leagues, mails may be safely landed at a jetty, which is completed for 100 feet in length, with twelve feet at its extremity at high tides, and six at low-water. Sir H. F. Young, Captain Cadell, and all who have co-operated in making the Murray a highway for millions yet unborn, deserve great credit for their zeal and perseverance, and will receive the thanks of all who view the dissemination of the Anglo-Saxon race over the waste spots of the earth as an object of the highest importance.

General Improvement.—The prosperity of South Australia is based on a solid foundation, and civilisation is everywhere advancing. Adelaide, in particular, has been much enlarged within the last few years. New buildings are rising in every direction, and the value of land has been greatly enhanced. The municipal authorities have made progress in the sewage and lighting of the city; and, in 1853, the legislature gave a grant of £30,000 towards supplying the citizens with abundance of pure water.

Frontage-ground in Adelaide has sold at £50 per foot, or at the rate of £10,500 per acre. This enhanced price will be seen by comparing the ground bought by the commissioners of the National Gallery of London, near Gore-house, Kensington, and contiguous to the site of the Great Exhibition, where 86 acres were purchased for £280,000, at the rate of £3,250 per acre.

A public market, erecting at Adelaide by the corporation, is 160 feet in length by 40 feet in width—outside dimensions: the stalls, 12 feet by 9 feet, have separate locks-up, and the occupiers and their produce are screened from the sun by a verandah, six feet wide: the centre is an open space; and all round the outside is a roadway, by which the stalls are supplied through openings in the external walls.

The outlying counties have kept pace with the capital; and a new pastoral district has been discovered to the north of Mount Eyre, between 31° and 32°: it extends from Mount Arden to Lake Torrens,

* At the Darling junction the waters commence rising in June; attain the highest point, in ordinary seasons, in October; and then continue falling until April.

† In 1853, two enterprising young farmers and millers of the Mount Barker district, constructed a small steamer, on which they embarked a load of farm produce for *Swan Hill*, in Victoria province.

over about 150 square miles; the country is mountainous; the ranges rise to the height of 2,000 feet, from which several streams, said to be perennial, flow. In one part, a level tract, capable of depasturing 500 head of cattle, is surrounded by perpendicular rocks of 1,000 feet elevation; the entrance to the "Pound," as it has been termed, is by a narrow swampy gorge, which cattle would not willingly pass. There is also said to be a good country between the eastern boundary of Lake Torrens and the Darling, which would be valuable, as there is a level line of road from the bight of the lake to the head of Spencer's Gulf. A useful, and therefore honourable career, is before those who have made South Australia their home; and England may well be proud of this, one of the youngest of her offspring.

Governor Young, in a despatch to Earl Grey, compares South Australia, in the fifteenth year of its age (in 1850), with New South Wales of the same age (in 1803); but the comparison is not a fair one, as the prosperity of the latter was a main element in the success of the former: the two colonies stand thus in the fifteenth year of their existence:—

New South Wales in 1803:		South Australia in 1850:—	
Land granted, acres	125,746	Land granted, acres	655,589
" cleared	"	" fenced	16,621
Wheat cultivation	7,118	Wheat cultivation	35,183
Barley and maize	5,279	Barley and oats	7,220
Horned cattle	No. 2,447	Horned cattle	No. 51,540*
Sheep	11,232	Sheep	885,918*
Horses	352	Horses	1,784
European residents	7,134	European residents	54,175

WESTERN AUSTRALIA.

This colony has been very slightly affected by the gold-discoveries on the eastern shores of Australia, but its character and prospects have been somewhat changed by the introduction, for the first time, in 1849-'50,† of convicts from England, and of persons who have undergone punishment at home for their offences, and to whom "tickets-of-leave" have been granted on their arrival in the settlement (*see* p. 399.) The necessity of a deportation of criminals must be evident from the fact, that in April, 1853, there were in gaols, houses of correction, &c., in England alone, 20,143 persons; or in the proportion of one *known* felon to every 800 of the inhabitants. As yet, the

* Exclusive of 33,747 horned cattle, and 202,482 sheep, depastured on common lands of the crown.

† Under authority of *order in council*, 1st May, 1849.

number of convicts sent to Western Australia has been very limited; and this judicious policy will tend to prevent the evil of a large prisoner class, before there be a sufficient number of free inhabitants to prepare the way for their profitable employment.

Population.—In 1849, the white population, exclusive of military, was 4,654. In 1850, exclusive of military and bond, it was 5,293—increase, 639. The convicts were in number, 170; the military troops of the line, 109; their wives, 19; children, 44: enrolled pensioners sent out as guard of convicts—men, 79; their wives, 64; children, 126: grand total of whites, 5,904.

The population, at the close of the year 1852, was 8,711, of which 3,066 were females, and 5,645 males. The number of the aborigines may be estimated at about 1,700; but it is impossible to arrive at any satisfactory conclusion with regard to their numbers, from their wandering habits. Of the population of 8,711, there were free, 6,574; bond, 1,432; and 705 military—being an increase of 1,615 over 1851.

During 1852, the colonial emigration commissioners dispatched to Western Australia four vessels, containing 629 emigrants—viz., 135 male, and 216 female, adults; and 104 male, and 114 female, children, under 14 years of age.

There are, as yet, no returns of the prison-population in 1853; but the estimated convict expenditure for the year 1852-'3, is £57,400, to provide for 600 prisoners, 1,300 ticket-of-leave men, and 200 superintendants, and their wives and families. The cost of the convicts is estimated at 1s. 2d. per day; the provisions for the whole, to £39,323 for the year.

That the introduction of convicts does not necessarily cause the deterioration of a colonial community, when due regard is paid to their moral and spiritual state, is evidenced by the statement of Governor Fitzgerald, who, in an official report to her Majesty's secretary of state, dated Perth, 7th of June, 1853, adverts to the favourable returns exhibited by the Blue-Book for 1852, which he says—

"Afford the most satisfactory evidence of the general progress and advancement of this colony in all the elements that usually contribute sources of wealth, prosperity, and contentment, and, I am happy to say, without a single drawback at this moment. This may appear strange language from the governor of a recently-made penal settlement; but I am bound to declare, whatever might have been the consequences and results of the intro-

duction of convicts in other settlements, it has as yet been productive of nothing in this colony but marked benefit, which is now fully admitted by even the most timid of those originally opposed to the introduction of convicts, who can scarcely realise to themselves the gratifying fact of the security felt by all as to the safety of life and property in every part of this widely-extended possession, notwithstanding there are nearly 2,000 ticket-of-leave men scattered throughout the inhabited districts among a free population, whose numbers do not reach 9,000.

"In submitting this very favourable view, I do not wish it to be supposed for a moment that there is a total immunity from crime or minor offences, but that looking at the increase that has been given in the last two years to the general population, bond and free, I doubt much if any greater increase of crime has resulted from the introduction of ticket-of-leave men, than would have been the case by the introduction of an equal number of any other kind of mixed immigrants. Much of this good result is, no doubt, to be attributed to the state of the law which gives such strong coercive power, by summary jurisdiction, to the magistracy in dealing with ticket-of-leave men; and a further cause in some way, I would fain hope is, from the determination of many of this class to lead a new life, and thus prove that the efforts made, and being made, by her majesty's government for their reformation have not been entirely fruitless.*"

In another passage, the governor says, "Crime, I am happy to state, is as small as can well be expected, and without a single act of violence on the person during the year."

Aborigines.—The report of Governor Fitzgerald (1852) on this distressing theme, is unfavourable. It is to be hoped, however, that although success may not at present attend the philanthropic efforts of societies and communities, there will be no relaxation of a duty which is imperative and self-imposed, for the preservation and civilisation of the aboriginal race.

Religion.—Since the introduction of convicts, three additional clergymen of the church of England have been appointed to the colony, which defrays one-half their salaries; the remainder being paid by the home government. The churches at York, Freemantle, and Bunbury, where these gentlemen are stationed, have full and attentive congregations.

Five thousand acres of land have been subscribed towards the formation of a bishopric. The Wesleyans and other Protestant Dissenters have increased their ministries, as has also the Roman Catholic community.

Education.—In Perth, five public schools receive government aid; several private ones

rely on their own resources. In Freemantle, two public schools, one for boys and the other for girls, supported by government aid, are well attended; there are also several private seminaries. In Guildford, the school is under the charge of a clergyman of the church of England, who receives government assistance. There are also schools at York, Bunbury, and Albany, under lay-masters paid by the colonists.

Government.—Western Australia remains under the form of government stated at p. 395, the inhabitants not being, as yet, able to take upon themselves the duties and increased burdens of self-government, as prospectively laid down in the imperial act. (See *Appendix*.)

Financial.—In this respect, the progress of the colony is slow, but satisfactory; the ordinary revenue having been doubled in ten years, and the land-sales augmented.

There has been no new imposition of taxes: the intercolonial postage has been reduced from 4*d.* to 2*d.* the half-ounce; and on all foreign letters, a diminution from 10*d.* to a universal rate of 4*d.*

Land.—The quantity of land alienated in Western Australia, up to August, 1852, independent of town sites and public reserves, was 1,330,143 acres, in 675 grants; or, on an average, nearly 2,000 acres to each grant. The town and suburban lots consisted of 1,378 acres, on 14 town sites. Of the above, 1,259,218 acres have been surveyed and marked, which exhibits a commendable diligence in the surveyor of the colony and his small staff. The appropriated, but unsurveyed lands, at the above date, were distributed over 101 locations, and consisted of 70,925 acres.

The applications for pastoral leases, up to October, 1852, extend over an area of 2,272,236 acres; the quantity thus sought, was, in 1851—acres, 1,671,000. No lease is granted for more than 20,000 acres; and not more than one-fourth of the external boundaries of any selection is allowed on any river or water, whose course or direction is known. The squatters have not, therefore, here the opportunity availed of on the Murray and other rivers, to monopolise water-frontages for miles. Leases or licenses are put up to auction, at an up-set price, in the same manner as land is sold: a pastoral is quite distinct from a tillage lease, and is paid for at a different rate; the charge for the latter is 2*s.* per acre; for the former, 2*s.* per 100 acres, or £1 per 1,000.

* Report on Blue-Book for 1852, p. 221.

The expectations entertained of great mineral wealth, have not yet been realised. At the Geraldine mine, in the Champion Bay district, the smelting of lead has commenced; and the neighbouring country is said to be rich in blue and green carbonates of copper, found at a depth of 12 feet from the surface, and with a soft matrix, similar to that of the Burra-Burra mine. The harbour, at the mouth of the *Hutt*, capable of receiving vessels drawing 12 feet of water, is within 40 miles of the mine.

Several thousand tons of guano have been obtained from rocky islets in Shark's Bay; and it is not improbable larger deposits of this valuable manure will be found on the coast still further north; which, as well as the interior, is still almost entirely unexplored.

Governor Fitzgerald, who has for several years zealously presided over the administration of the colony, and has endeavoured to develop its resources, made an inland tour, in April, 1852, to the extent of 300 miles around Champion Bay [pp. 376—8]: he considers the bay "a secure anchorage in all weathers, for a well-found ship." There is, however, as yet, a scarcity of

drinking-water—that obtained by sinking wells being salt. The governor remarked, that "the land between the *Bowes* and *Greenough*, and the *Greenough* and the *Irwin* rivers, is, on the whole, both for pastoral and agricultural purposes, equal, if not superior, to any similar extent of land traversed in the colony, and unattended by any of the evils arising from the existence of the *poison-plant*, which has proved so great a scourge to the sheep-farmers in other districts. * * The absence of timber is the only want noted: the climate is second to none. The country between the *Hutt* and the *Murchison* rivers, although possessing patches of good land, is, on the whole, of an inferior description."*

This fine section of Australia only wants population to render it as prosperous as any of the neighbouring settlements, while its position on the Indian Ocean is favourable for intercourse with India. Whether gold exists here or not, is yet to be ascertained; that copper and lead prevail is very probable; but there can be no doubt that there is an abundance of good land, with a salubrious climate, adapted for the sustenance of a large portion of the human race.

CHAPTER III.

SUMMARY VIEW OF AUSTRALIA—SOCIAL AND POLITICAL PROSPECTS.

In the preceding pages, an endeavour has been made to trace the rise and progress, the vicissitudes and prosperity, of each of the four Australian colonies: all that can now be done, within the limited remaining space, is to offer some general remarks on their present state and future prospects; but such is the rapid transition of these settlements, that the present becomes the past while its prominent features are being chronicled—the daguerreotype of to-day proving an inadequate representative of the morrow: and as regards the future, the most sanguine anticipations may fall short of possible realities.

Yet the numerous facts here recorded, will convey to the home reader some im-

pression of the extent and resources of Australia: and they will serve as indices to mark the various phases of social and political existence in a young community.

Under Providence, all that Australia now requires for the fulfilment of its destiny is a virtuous population, guided by intelligence; there, the labourer receives fair wages for the sweat of his brow; the mechanic, payment in proportion to his skill; the tradesman, good profit on his retailings; the merchant, quick returns on his capital; the ship-owner, a remunerative freight; the agriculturist, rich harvests for his toil; the grazier, high prices for his cattle; the squatter, a certain demand for his wool; and the government, a large and increasing revenue. There is a healthy climate, cheap food, plenty of work, abundant scope for

* *Correspondence on Convict Discipline*, 13th December, 1852—*Western Australia*, p. 264.

enterprise, a free government, light taxes, religious toleration, scholastic instruction for all classes, and as peaceable, intelligent, and honest society as may be found in most other countries.*

Even since the discovery of gold, there

* That the climate of the temperate regions of Australia is salubrious there can be no doubt, otherwise forty to fifty thousand persons could not have remained at the gold-fields throughout the year, provided with only tents or bark-huts pervious to wind and rain. There has been, doubtless, much disease and many deaths at Melbourne, owing to the overcrowding of habitations, absence of sewage and cleanliness, irregular diet, drinking, excitement, and other causes; moreover, it is unreasonable to expect the climate of England in the latitude of Italy. With ordinary care, health and longevity may be attained in the present four colonies, although, in December, January, and February, the temperature is very variable, and hot winds, for a few days, distressing to new comers. How far the climate may be affected by clearing and cultivating the soil, or how strong or enfeebled the human race may become, after a few generations, time only can demonstrate; there is, however, no reason to entertain unfavourable views on the subject. The cutting down of woods, though for a season causing an exhalation from the ground, ultimately renders the air drier and purer; and as to the Australian youth of New South Wales,—their physical and mental qualities are at least on a par with their corresponding grades of rank in England. A Report from the Colonial Surgeon at Adelaide (J. G. Nash), in March, 1852, furnishes details which are applicable to the other three colonies:—

“The salubrity of the climate of South Australia is indisputable, the thermometer, in summer, averaging 73° Fahr., and in winter, 55° Fahr., showing a mean temperature for the year of 65° Fahr., being only one degree higher than the mean temperature of Madeira. There is no endemic disease in South Australia. From the peculiar character of the indigenous vegetation, and from the absence of moisture during the summer months, there is but little decomposition of rank vegetable matter, consequently bilious, remittent, and intermittent fevers are scarcely known. The prevalent fever of South Australia is closely allied to the congestive fever of Bengal, and chiefly affects the newly-arrived. Eight-ninths of those cases that terminated fatally occurred in persons who had not been one year in the colony. The membranes of the brain, the bronchial and intestinal mucous membranes, are the parts chiefly congested, the former more especially in children, arising from exposure to the sun, and the two latter from checked perspiration, irregularities in diet, or the too frequent use of stimulants. Meningitis, bronchitis, or dothien enteritis, is generally found more or less developed in the continued fever of South Australia. No eruptive fevers, with the exception of occasional cases of scarlatina, have yet appeared in the colony. The dry warm atmosphere of Adelaide has a tendency to prevent the development of the strumous diathesis, consequently there are but few cases of scrofula. Phthisis pulmonalis is also infrequent, and progresses but slowly in South Australia, opening a wide field to the skill of the physician and the efficacy of medicine in checking the disease.

“Organic disease of the liver is rare, but that vis-

are indications that the *possession* of the precious metal is not invariably the “root of all evil;” although there can be no doubt, that in the undue desire for its attainment, much sin and suffering have occurred; but crimes, especially those of a sanguinary

cus frequently becomes congested soon after the rainy season sets in, and relieves itself by an increased secretion of bile, rendering jaundice at this period of the year a very common affection.

“Dysentery is one of the prevalent diseases, but yields readily to treatment. It is caused by improper diet or clothing; in the one case directly causing a determination of blood to the mucous membrane of the alimentary canal, and in the other indirectly by checking the insensible perspiration; and in both cases producing that congestion of the portal system which so frequently accompanies dysentery. Epidemic cholera has not visited South Australia since its colonization. Diseases of the brain are not common in this colony, and the admissions into hospital have been chiefly cases of delirium tremens. I do not think that insanity prevails here to a greater extent than in England, and generally occurs in those who have recently arrived. Some of the causes of insanity, such as regret at leaving home, anxiety during the voyage, and disappointment perhaps on landing, are in more active operation at that time than at any subsequent period. Dropsies are not prevalent in South Australia. Rheumatism is a frequent disease in the bush, and most of the cases admitted into hospital have been sent from the sheep stations.

“Abscesses and ulcers are not of more frequent occurrence here than at home. Wounds and injuries in South Australia are most frequently ‘gun-shot wounds,’ accidents from riding horses not properly broken in, and injuries received in felling trees. Accidents from bullock-drays are frequently occasioned by the dangerous practice of riding on the pole of the dray. Conjunctivitis is the most prevalent disease of the eyes in this colony, and, in the summer months, is frequently occasioned by exposure to the night air after having been subjected to the glare of a cloudless sky. The impalpable dust in the streets and on the roads also acts as an irritating cause. Diseases of the skin are not often met with.

“Annexed to this report are tables showing the prevailing winds and weather, taken from an average of ten years; of the height of the barometer from an average of seven years; and of the thermometer from an average of ten years. The quantity of rain fallen, is an average for seven years:—

“*Barometer, 7 Years.*—Maximum, 30 deg.; 7 min.: minimum, 29; 5: mean of maximum and minimum, 30; 1: range, 1; 2: annual mean, 30; 2: greatest variation from 9 to 9—0; 3: least variation from 9 to 9—0; 0: mean variation from 9 to 9—0; 0.

“*Thermometer, 10 Years in the Shade.*—Maximum, 102 deg.; minimum, 45; mean of maximum and minimum, 73; range, 57; annual mean, 65; greatest variation, from 9 to 9; 23: least variation, from 9 to 9; 2: mean variation, from 9 to 9; 10.

“*Thermometer, 10 Years.*—Days, above 100 deg., —3; above 100 and 91,—17; above 90 and 81,—52; above 80 and 71,—106; above 70 and 61,—119; above 60 and 51,—66; above 50 and 41,—2.

“*Winds, 10 Years.*—N., days, 13; N.E., 61; E., 7; S.E., 42; S., 20; S.W., 116; W., 39; N.W., 58; variation, 9; predominant for year, S.W.

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character, have diminished; and there is a manifest improvement in the position of the small settlers: they evidently possess, in greater abundance than formerly, the com-

“*Weather, 10 Years.*—Clear days, 29; cloudy, but fine, 190; overcast, without rain, 7.—Rain, little, 73; rain, much, 64; rain, constant, 2. Total, 139.

“Calm or light breezes, 232; fresh breezes, 118; strong gales, 15; hail, 5; thunder and lightning, 21.”

Counties.	Latitude.	Mean Temperature of the Year.	Warmest Month.	Coldest Month.	Mean Barometer of the Year.	Quantity of Rain during the Year.	Aqueous Vapour.	Number of days on which Rain fell.
						Inches.		
London . . .	N.L. 51-30	50	62	36	29-89	20	5-5	178
Madeira . . .	N.L. 32-37	61	73	58	30-03	25	—	73
Auckland, N.Z.	S.L. 36-51	59½	69	52	29-92	45½	4-3	160
Adelaide, S. A.	S.L. 34-40	65	73	55	30-2	22	—	139

“The highest range of the thermometer, in 1852, was 105°; the lowest, 44°; the average is 67°. The number of days on which rain fell, in 1852, was 115 days; and the total quantity, 27-34 inches.

“The most steady rains, both in winter and summer, begin with the wind at about north-east, the rain falling greatly and the wind light, both gradually increasing as the latter veers round to the north, when the rain is much heavier, and still increasing until the wind is about north-west, when the heaviest fall takes place.

“After this, the wind draws round to the west and south-west, when the rain gradually ceases, or at least only occurs in heavy squalls and showers, and the weather clears up. The period occupied by a continuous fall of rain rarely exceeds twelve hours. The wind will, however, often hang at about west, with a few points’ variation to the south for some days, during which rain constantly occurs in showers, but no lengthened fall unless the wind has backed round to north.

“The heaviest showers occur after a hot north-east wind, drawing round to north-west, at which point an inch of rain has fallen in less than half-an-hour,

accompanied by thunder and lightning. With reference to the connexion between the weather and the barometer, it is to be remarked, that the latter invariably falls with a north-east wind, rising with a south-west one, generally attaining its lowest point with the wind at north-west, and a strong gale blowing,—the quicksilver rising rapidly with the wind to the south of west.

“Generally throughout the year, during fine weather, a land and sea breeze alternate. About sunset, the wind blows at about south-east to east, dying away towards daylight; a light sea-breeze from west to south-west coming up about nine A.M.; or else the night wind, towards morning, draws round from east to north-east by north, to north-west and west towards the afternoon.

“Should it hang to the east of north, with a falling barometer, it is a certain indication of a hot wind.”—*Blue-Book for 1852.*

The hygrometric state of Sydney, N. S. Wales, is shown by a Meteorological Register, kept for 11 years, at the South Head (240 feet above the sea) of Port Jackson (lat. 33° 51' 11" S.): the quantity of rain which fell is more than double that of London :

Months. [See <i>Explanations</i> —next page.]	Rain.		Total number in each month during those years, of		Mean monthly numbers (deduced from those years) of	
	Total quantity in each month during the 11 complete years ending 1851.	Mean monthly quantity, deduced from these 11 years.				
	Wet days.	Dry days.	Wet days.	Dry days.		
January	51-145	4-6495	143	198	13	18
February	53-758	4-8870	146	164	13	15
March	44-797	4-0724	136	205	12	19
April	81-233	7-3848	140	190	13	17
May	48-063	4-3693	132	209	12	19
June	39-258	3-5689	121	209	11	19
July	60-077	5-4615	148	193	14	17
August	35-878	3-2616	133	208	12	19
September	33-186	3-0169	127	203	12	18
October	59-032	5-3665	142	199	13	18
November	22-239	2-0308	119	211	11	19
December	38-616	3-5105	122	219	11	20

Rain.		Total number during the 11 years, of		Which gives a yearly average of		Rain.		Max. and Min. number of wet days in any month.	
Total quantity during the 11 years.	Which gives a yearly average of	Wet days.	Dry days.	Wet days.	Dry days.	Maximum in any month.	Minimum in any month.	Maxim.	Minim.
567-382	51-580	1,609	2,408	146	219	25-43	0-07	22	3

forts, as well as the necessaries of life, and their moral standard is elevated.* A strong disposition is evinced by fortunate miners to expend their acquisitions in the purchase of farms or homesteads; and sooner or later, gold-digging will become a settled business, instead of a mere scramble or lottery.

It is impossible to estimate the amount of mineral wealth scattered profusely throughout this strange land: not only gold,† but silver, copper, antimony, and most of the known metals, separate or in combination, have been found in Australia; while excellent coal, adapted for smelting, is obtainable in numerous districts.

Tin is extensively distributed in both Victoria and New South Wales: in the former colony, more especially, at the Ovens; and as regards the latter, in the Bendoc and other districts of the southern country, and about the Rocky River; also, all through New England and its flanks.‡

But Australia does not depend on its minerals, although they are a very useful adjunct as a raw material for exchange. The navigation of the Murray and its tributaries by steam-tugs, is opening up many thousand square miles of the finest regions of New South Wales, Victoria, and South Australia, for pastoral and agricultural pur-

Explanations. — The rain-gauge is cylindrical, ten inches in diameter, having a funnel-lid, with sides two inches deep, then decreasing to a tubular hole of half-an-inch diameter, to prevent as much as possible evaporation and other decrease, or extraneous augmentation. It is placed on the ground in a perfectly open situation. It should be observed, that in taking account of the number of wet days, every day wherein the smallest quantity of rain falls is included. A striking uniformity is observable in the monthly and yearly proportionate means of wet and dry days; and even in the very dry year of 1849, this uniform ratio was preserved. The wettest month in the average of the 11 years appears to be April, and the driest month, November.

* Considering the origin of New South Wales, as a penal settlement, and the variety of all classes from different nations who have resorted to the gold-fields since 1851, it is remarkable how few murders have recently been committed, as exemplified in the capital punishment returns. The remarks on death-sentences at p. 486, were written before I saw the standard work of Beccaria on *Crimes and Punishments*. In the twenty-eighth chapter of his admirable treatise, the author, without discussing the subject in a religious aspect, condemns, by conclusive reasoning, the destruction of our fellow-beings by legal tribunals;—proves that “the punishment of death is pernicious to society;”—shows that “human sacrifices” are an abuse of religion;—and asks, “is it not absurd, that the laws which detest and punish homicide should, in order to prevent murder, publicly commit murder themselves.”

† Mr. John Calvert, a successful gold-digger from

suits. Where river communication is impracticable, rail or tram-roads will supply the requisite facilities for transit; increase of population will enable the colonists to collect supplies of water, which now rush uselessly to the ocean: hereafter they will be carefully preserved against seasons of draught; and by means of aqueducts, fertilizable tracts, now arid, when supplied with perennial moisture, will yield abundance of food for man and beast. Throughout the whole of the settlements, there is a manifest spirit of improvement abroad: an energy which peculiarly distinguishes the British race, pervades every community; and each colony seems engaged in friendly emulation, seeking to attain a prosperity which shall outrival that of the nations of Europe and America.

Northward of Moreton Bay and Port Curtis, on the verge of the tropic of Capricorn (*see* p. 147), a magnificent pastoral and agricultural region has been explored, and a township formed, bearing the respected name of the present able chancellor of the exchequer (Gladstone.) Here cotton, rice, tobacco, and other products which have enriched the southern states of America, may be cultivated in abundance. If settle-

ments of Chinese, and other nations from Australia, has issued (in 1853) an interesting volume on the *Gold Rocks of Great Britain and Ireland*—showing that, in past times, gold was extensively obtained in England, Wales, Scotland and Ireland. The Romans procured the precious metal at Oogofan in Carmarthenshire, from the Poltimore mines in Devon, at Goldscoop in Cumberland, and Lead Hill in Scotland: during the middle ages it was worked in Devon, Cornwall, Somerset, Gloucester, Shropshire, Cumberland, Westmoreland, Northumberland, Lanarkshire, and Fife; it is also obtainable in Cheshire, Merionethshire, Ayrshire, Perthshire, Aberdeenshire, and Sutherland; and in Wicklow, Cork, Antrim, and Londonderry. The work of Mr. Calvert is of great importance to the metallurgist and mineralogist, and to all interested in the supply of gold from different regions: the author also refers to the diamond, ruby, and hyacinth, being found among the gold rocks in the United Kingdom, and says, that he obtained these rare stones, together with the sapphire, beryl, chrysoberyl, opal, and others, in Australia.

‡ The tourmaline granite, in which stream-tin is found in Cornwall, prevails in the above-named Australian districts; and there is reason to think, that the Banca tin-mines present a similar formation: gold is known to exist in various parts of the Indian Archipelago, and it is said to have been recently obtained at Celebes, among the crystalline quartz-hills of the island, in flakes or sheets of nine or ten inches square, and an eighth-of-an-inch in thickness. The Victoria ore, when analysed, gave tin, 98; lead, 1·20; gold, 45 per cent. Tin and gold are obtainable near Mount Ophir, in Malacca.

the populous islands of the Eastern Archipelago, be established at intervals along the northern coast, stretching from Cape York to Shark's Bay, in Western Australia, full scope might be given to the energies of several million people, who would eventually become large consumers of British manufactures, and contribute to the prosperity of the European colonies in the temperate portions of this extensive region.*

But among the various measures necessary to the well-being of the colonists, *self-reform* stands first: neither flakes of gold beneath the soil, nor countless herds and flocks on its surface—neither political nor social institutions can ensure individual happiness or national greatness. Unless Christian virtue, temperance, and chastity be the main-spring of action, no community can be permanently prosperous; and all extrinsic wealth is but as “sounding brass and tinkling cymbal.” Vital (not formal or lifeless) Christianity is the divine salt, by which alone human prosperity can be preserved from decay and corruption; the renovating change from an inherent taint to purity, must be perfected individually; and the sin which doth most readily beset a community, must be eradicated by each of its members. Take, for instance, the crime of drunkenness, which prevails in Sydney and Melbourne to an awful extent. While this fearful enormity prevails, it is in vain to expect individual or national good. The man debauched with strong drink, is debased far below the level of the brute, who, for ought we know, possesses some higher enjoyments than mere animal appetite: the drunkard, although created in the likeness

* The exploration of tropical Australia is one of the most interesting geographical problems which remains to be solved in our day; and it is understood that her Majesty's government, at the persuasion of the Royal Geographical Society, have resolved to prosecute this meritorious enterprise. The fate of the gallant Leichard (see p. 5) is no longer in doubt; it is believed that he and his companions were all murdered by the aborigines, not long after they left Moreton Bay. The colonists at the three principal settlements ought to set on foot expeditions of discovery from their respective capitals;—New South Wales undertaking the region westward from the Gulf of Carpentaria to Buccaneers' Archipelago: from Victoria a party should endeavour to penetrate, direct north, towards Cambridge Gulf: the spirited colonists at Adelaide might open up a route with Perth, in Western Australia; while an expedition sent from England should explore the entire breadth of Australia—along the tropic of Capricorn—either from east to west, or from west to east. There is an abundance of money in the Australian treasuries to provide equipments and rewards

of his Maker, and endowed with a capacity for pure and unfleeting joys, spurns the precious gifts designed for his delight; barter the glories of eternity for a few frenzied moments of time; and has a foretaste, even in this probationary stage of existence, of endless torments, of unsatisfied desires, where the worm ceaseth not to gnaw—where the fire is unquenchable—and where an undying remorse will be the bitter lot of all who refuse obedience to the commands of God, and reject the unsearchable riches of Christ.

The consumption of ardent spirits and fermented liquors in Australia, is beyond any possible requirement for health or conviviality: thousands drink at all times of the day, on every occasion, during hours of business or of rest;—with some, periods of toil or abstinence are followed by a carnival of indulgence. This important subject, which has engaged the earnest attention of statesmen and moralists, has been alluded to in a previous page (426); and I therefore conclude with quoting the words of the honourable Edward Everett, wherein that experienced senator sums up the effects produced by ardent spirits, in the United States, during the past ten years:—

“1. It has cost the nation a direct expense of \$600,000,000. 2. It has cost the nation an indirect expense of \$600,000,000. 3. It has destroyed 300,000 lives. 4. It has sent 100,000 children to the poor-house. 5. It has consigned at least 150,000 persons to the gaols and penitentiaries. 6. It has made at least 1,000 maniacs. 7. It has instigated to the commission of 1,500 murders. 8. It has caused 2,000 persons to commit suicide. 9. It has burnt or otherwise destroyed property to the amount of \$10,000,000. 10. It has made 200,000 widows, and 1,000,000 orphan children.”

for the bold pioneers in such meritorious enterprises; and, doubtless, many men accustomed to bush-life would, with suitable inducements, venture their lives in solving the enigma,—*of what does the interior of Australia consist?* Is it a mere sandy waste? May there not be a great inland sea or lake? Possibly, a lofty chain of mountains abounding in gold, diamonds, and precious stones? or not unlikely, a fine table land, trending to the northward and westward, clothed with forests, and covered with sweet herbage, on which millions of sheep, horned cattle, and horses, may be multiplied. The geographical configuration would favour the idea that this unknown expanse may be reached by some river which has its embouche on the north or north-west coast; and an exploring party, traversing the region of the head-waters which flow into Van Diemen's Gulf, Cambridge Gulf, and Buccaneers' Archipelago, would determine this point. Having taken possession of the whole of this island-continent, to the exclusion of other nations, it behoves us, as a scientific and a commercial people, to investigate fully the condition of the territory thus acquired.

There is only one effectual mode for the permanent cure of inebriety—the adoption, *in practice*, of Christian principles.

The deplorable deficiencies of the church of England, in the early stages of the settlement of New South Wales have been shown in previous pages: happily, former apathy has passed away, and under the bishoprics of Sydney, Newcastle, Melbourne, and Adelaide, an efficient clergy are zealously labouring in the vineyard of their Lord. Other religious communities are working in harmonious co-operation; and the seed which was sown with toil and care, is now, it is to be hoped, ripening for the harvest. The only complete ecclesiastical return before me, for the four colonies, is that of the Wesleyan body, whose first missionary (the Reverend Samuel Leigh), with some difficulty, got permission to commence his pious duties in New South Wales, in 1815, and whose ministrations were, at the commencement, restricted to a few soldiers and reformed convicts.* There were then only four clergymen of the church of England; no Presbyterian minister; and but fourteen accredited Wesleyan laymen. The settlement consisted of many thousand prisoners, sunk in crime and bestiality; and the free colonists, with very few exceptions, cared little for religion or its concerns. Now, there are church of England pastors in every district, and there are about 20,000 members of the church of Scotland. In the four colonies of Australia, the Wesleyans, in 1853, had—chapels, 119; other preaching places, 136; missionaries and assistant ditto, 50; catechists, three; day-school teachers, 41: *unpaid agents*—viz., sabbath-school teachers, 787; local preachers,

281; full and accredited church members, 4,632; on trial for membership, 213; sabbath-schools, 100; sabbath-scholars, 6,837; day-schools, 25; day-scholars, 2,148; and attendants on public worship, 30,190.†

There is no state-church in Australia; all Christian denominations that choose to accept pecuniary aid from government, share in the appropriation of the public funds devoted to the maintenance of religious ordinances and scholastic instruction; and this toleration, combined with the freedom of political institutions, and an untaxed, unlicensed press, gives to our Antipodean fellow-subjects an amount of civil and religious liberty, not surpassed, if indeed equalled, by that of any other community in the world.

* See an interesting life of this Christian teacher, by the Rev. A. Strachan, published in London, 1853.

† In 1853, the London Wesleyan committee made arrangements to send seven additional ministers to the four then residing at Victoria, which was no sooner known in Melbourne, than the Wesleyan congregations there forwarded, through the Rev. J. Harding, £600 towards the outfit and passage of the missionaries; this formed but a very small portion of the contributions of these zealous Christians: between the months of May and December, 1853, a chapel was erected at Prarhan, at a cost of £1,400; another at St. Kilda, (£1,300); at Brunswick, (£1,600); at North Melbourne, (£1,000); one in progress at Richmond, (£3,000); and the chapel at Collingwood, undergoing enlargement, (£2,000.) These chapels are all within four miles of the old Melbourne chapel, in Collins'-street; others are in progress at a greater distance from town, and particularly near Geelong, and at Brighton, Bendigo, and Forest-Creek. A mission-house has also been erected near the "Wesleyan Home," (£1,500); another at Geelong; and

With regard to the commerce carried on with Australia, there is no branch of industry more beneficial to the English merchant and manufacturer. Among the erroneous opinions advanced by the opponents of colonies, one of the most prominent is the assertion, that our intercourse with independent states is more beneficial than that conducted with transmarine dependencies; and, in support of this allegation, the trade with England and the United States is quoted as a proof—a large increase having taken place since the separation of the former North American colonies from the crown of England: but this assertion will not sustain the dogma; for there are various considerations which must be taken into account—such as the great increase of population in America; the large production of corn, cotton, tobacco, and rice, as staples, exchangeable for British manufactures; improved facilities of intercourse; and one is in course of erection at Brighton. An important change has just been decided upon respecting the Australian missions. The British conference has proposed to them, by a deputation (the Rev. Robert Young), that they should henceforth become an independent body, finding all their own support, and conducting their own affairs. This has been accepted by the Australian Wesleyan church, which will now cease to be a mission, and become itself, in turn, the source of missionary agency to the neglected parts of Australia, and other regions of the South Seas. The missions in Van Diemen's Land will form part of the same conference; and those in New Zealand, the Friendly and the Feejee Islands, will be placed under its direction. For these last, however, all the funds will not at once be found in Australia; but for a time, the parent missionary society will annually grant a certain sum for carrying on the Polynesian missions, which will be decreased yearly till it altogether ceases; and then the head church in Australia will find itself fully provided with work for its missionary zeal, both domestic and foreign.

other matters which cannot here be discussed. Yet, without reference to the protective and prohibitory duties adopted by foreign states,* or to the national value of a barter between one part of the empire and another, being at least equal to twice the same amount of trade carried on with a foreign country—it might be shown, that

* British manufactures are received into Australia either free of duty, or in most instances at little more than nominal rates; while in the United States, on some articles prohibitory duties are imposed; and on others there is a high revenue tariff. Here is a picture from the *London Times*, of the reception free-trade has met with on the continent of Europe:—"A statement has lately been prepared of the changes made by foreign states in their tariffs, as regards the principal articles of British and colonial produce and manufactures during the last seven years—namely, from 1846 to 1853. From this it appears that the countries which have made alterations have been Russia, Sweden, Norway, Denmark, the Zollverein, Holland, Belgium, France, Portugal, Spain, Sardinia, Switzerland, Austria, Turkey, and Mexico. All the changes by Russia have been in the direction of a reduction of duties, or the removal of prohibitions; but, although nominally large, they have, for the most part, merely consisted of a substitution of one preposterous rate for another, which would prove equally efficient in keeping out our goods, while, at the same time, the pretence might be made of a concession. As regards Turkey, the case has been wholly different, an average reduction of about forty per cent. having taken place upon a large class of important articles, which were previously not subject to immoderate rates, while in no instance has a new or increased duty been imposed. In the Swedish tariff, the alterations have consisted chiefly of a reduction of duty upon ships, their stores and materials, and the removal of a prohibition on wrought-steel; while there has been an increase of 100 per cent. upon most kinds of woollen manufactures, and of 278 per cent. on salted herrings, coupled with the enforcement of a prohibition against bar and hoop-iron. As regards Norway, there has been some considerable reductions in cotton, linen, and woollen manufactures, bar-iron, and coals, while a duty has been imposed on machinery, which was previously free. Denmark, also, has greatly lowered her rates on a large series of important articles; but, at the same time, has increased them on woollens, fine ironmongry, gloves, salt, beer, and porcelain. The alterations made by the Zollverein have, with the exception of coffee, all been directed against our commerce, an increase of from fifty to 200 per cent. having been adopted on cottons, linen, and linen yarn and manufactures. Holland presents an example of progress towards freedom, coals and salt having been entirely exempted from duty, and great reductions having been made on iron, copper, linen manufactures, machinery, and sugar. Belgium, on the contrary, has tended towards restriction, having imposed a heavy augmentation of duty on linen manufactures, most kinds of woollens, and coals. Tin, lead, and earthenware have, however, been set free, and the duty has been reduced on copper, salt, and herrings. France has made only two alterations—a reduction in raw and an increase on cast steel. The changes by Portugal

our commerce with Canada has augmented in a far larger relative proportion than that with the United States since the commencement of the present century, while, *per capita*, the consumption of British manufactures is *three* times greater, in our present North American colonies, than it is, even now, in the adjacent republic.†

have been numerous, and mostly on the adverse side, especially as regards cotton manufactures. On metals and cutlery, however, there have been some considerable reductions. Spain exhibits several reductions, but in many cases, like those of Russia, they are little better than nominal, while on silk manufactures, pig-iron, fish, and coffee, there has been a heavy increase. Sardinia, like Holland and Turkey, appears on the side of a liberal policy, an average reduction of fifty per cent. having been made in the rates on all the most important articles of British industry. Austria has mitigated, in several instances, her prohibitory duties, and at the same time has taxed linen and woollen yarns, leather, and beer more heavily than ever. Finally, Mexico has made some considerable reductions in many of our most important articles of manufacture, although the rates retained are too high to admit of any very active commerce. At the same time, she has increased her duties on glass-ware and gloves."

† In the first volume of this work, the liberal tariff adopted in British America will be seen in strong contrast with the protective tariff of the United States. The tariffs in force at New South Wales and at Victoria, will be found at pp. 489—510; recently, all goods, ware and merchandise, except spirits, coffee, tea, and tobacco, were admitted into Melbourne *free of duties*. The duties levied are on the lowest scale consistent with the receipt of revenue.

"All imported goods, with the following exceptions, are admitted into South Australia at a duty of five per cent. *ad valorem*:—Beer, porter, ale, cider, and perry, 4*d.* per gallon; brick—fire and bath, 5*s.* per 1,000; coffee, 6*s.* per cwt. Corn, meal, and flour, viz.:—Wheat, barley, oats, maize, and millet, peas, beans, and pulse, 6*d.* per quarter; malt, 3*s.* per quarter; flour, meal, bran, and pollard, 2*d.* per 100 lbs.; fruit—dried, of all sorts, 4*s.* per cwt.; hops, 2*d.* per lb.; iron—bar and rod, 10*s.* per ton; iron—sheet and hoop, 14*s.* per ton; iron—pig, 2*s.* 6*d.* per ton; pitch and tar, 1*s.* per barrel; provisions and preserved meats, 3*s.* per cwt.; resin, 6*d.* per barrel; salt, 3*s.* per ton; spirits, or strong waters of all sorts, 9*s.* per gallon; sugar—refined and candy, 4*s.* per cwt.; sugar, Muscovado, 2*s.* per cwt.; sugar, molasses, 1*s.* per cwt.; tea, 2*d.* per lb.; tobacco, manufactured, 1*s.* per lb.; ditto, unmanufactured, 6*d.* per lb.; cigars and cheroots, 2*s.* 6*d.* per lb.; snuff, 1*s.* per lb.; tobacco—sulphured and tarred, for sheepwash, 1*d.* per lb.; wine, 1*s.* per gallon. Wood—posts and rails, hand and poles, 1*s.* 6*d.* per 100; paling, 6*d.* per 100; shingles and laths, 6*d.* per 1,000; trenails and spokes, 6*d.* per 100; oars, 2*s.* per 100 feet; square timber and balks, deals, battens, quartering planks, boards, and sawn, hewn, or split timber of kinds not otherwise enumerated, 2*s.* 6*d.* per forty cubic feet.

"*Free List*.—Animals, living; baggage of passengers; books, printed; bullion and coin; coals, coke, and other fuel; plants and trees; seed and roots—garden; specimens illustrative of natural history;

In Australia, the fallacy of this anti-colonial theory is fully seen; all, however, that can now be advanced in its refutation, is to show the value of exports from the United Kingdom to Australasian settlements, at four intervals, since 1828, viz. :—1828, £443,819; 1838, £1,336,662; 1848, £2,500,000; 1853, about £15,000,000. Thus, in the first period of ten years, the imports from Great Britain were trebled; in the second, nearly doubled; and in the third period of five years, sextupled. No commerce with the United States or other foreign country can show anything like this rate of commercial progress; and should gold, as well as wool, continue to be a large staple product, the consumption of goods will be enormous.

The shipping employed in this trade has increased in an extraordinary manner: within the last three years the total number of vessels dispatched from the United Kingdom for Australia was (according to the re-

pictures and prints; works of art; wool; tallow; skins and hides (raw); bark; gum; bales for wool; and ore bags."

* There is now a rivalry between shipping companies, as to which shall construct the largest vessels. The following is stated to be the dimensions of one preparing for the *Eastern Steam Navigation Company*, and intended for the Australian or Indian trade; this leviathan, if built and launched, will considerably exceed the tonnage of the *Great Britain* or the *Himalaya*. "Her length is to be 680 feet; breadth, eighty-three feet; depth, fifty-eight feet, with screw and paddle-engines of aggregate nominal horse-power of 2,600. In addition to taking from 4,000 to 6,000 tons of coals, she will be able to carry 5,000 tons' measurement of merchandise, and will have 500 cabins for passengers of the highest class, with ample space for poops and lower class passengers. The whole of her bottom, and up to six feet above the water-line, will be double, and of a cellular construction; so that any external injury will not affect the tightness or safety of the ship. The upper deck will also be strengthened on the same principle; so that the ship will be a complete beam, similar to the tube of the Britannia-bridge. It will be divided into ten separate water-tight compartments. She will have separate sets of engines, each with several cylinders; and separate boilers will be applied to work the screw, distinct from those working the paddle-wheels; so that, in the event of temporary, or even permanent, derangement of any one of the engines, or of either the paddle-wheels or the screw, the other engines and propellers would still be available. It is computed that her great length will enable her to pass through the water at the velocity of fifteen knots an hour; and, by the great speed, combined with the absence of stoppages for coaling, the voyage between England and India, *via* the Cape, may be accomplished in thirty or thirty-three days; and between England and Australia in thirty-three or thirty-six days. It is said that the ship will become, by its construction, a beam of sufficient

turns collected by the intelligent editor of the *Liverpool Albion*):—

Years.	Ships.	Tons.
1851	271	145,777
1852	501	304,118
1853	1,074	516,772

Not only has the tonnage been largely augmented: the character of the ships has also been greatly improved; while the length of a voyage to the Antipodes has been materially lessened.* The average duration of the passage to Australia, in 1852-'3, of the *sailing-vessels* was, from London, 126; from Liverpool, 105—days: the quickest were made by leaving England in the summer-months; and the average is in favour of large ships: thus, those of 600 tons, have an advantage of twenty-four days over those of 200 tons; and the 1,200 ton vessels, twenty-two days over the 600 tons. Liverpool exceeds any other part in the size and

strength to meet any strain to which it can be subjected, and will consist of so many distinct compartments, that no local injury, however serious, will affect its buoyancy to any dangerous extent."

Nearly equal to the above is the *Great Republic*, recently built at New York for the Australian trade, and almost entirely destroyed by fire when ready for sea. This American clipper will carry 4,000 tons of goods; she is fifty-eight feet wide, and thirty-nine feet deep, and, if placed on end, would tower 120 feet above the monument near London-bridge. In her construction, 1,500,000 feet of hard pine have been used, 2,056 tons of hard oak, 336½ tons of iron, 56 tons of copper for bolts, &c., exclusive of sheathing. She will spread 16,000 yards of canvas, with four masts. A new feature on board is a steam-engine of 15-horse power; this is intended to do all the heavy work of the ship, such as hoisting in and discharging cargo, setting up rigging, hoisting topsail, &c.; it is also connected with an apparatus for distilling fresh water from salt water. It will also diminish the number of men required to work the ship—her crew consisting of only 100 men and thirty boys. The keel, for sixty feet forward, is gradually raised from a straight line, and curves upwards into an arch, so that the gripe of the fore foot is the arc of a circle, and not angular, like other vessels. The lines are concave forward and aft, up to a few feet above the load displacement line; the sides are arched, something like a man-of-war, but not so much in proportion to her size; the stern is semi-elliptical in form, and, instead of bulwarks, the outline of her spar-deck is protected by a rail supported by turned oak stanchions. She has four complete decks, and four houses on her spar-deck, erected for the use and comfort of the crew. All her beams, masts, spars, &c., are in proportion to her enormous size: the main-mast and fore-mast are forty-four inches in diameter, the main-yard twenty-eight inches, and 120 feet long, carrying a sail 120 feet square. These structures seem to be in excess, for practical use.

tonnage of the ships dispatched to Australia; several of the vessels from this important haven having traversed nearly 15,000 miles in seventy-seven, eighty-two, eighty-four, eighty-eight, and ninety days;—in fact, in less than three months, or about one-half the period occupied in former years.

The transit of passengers will add to the amount of navigation; for tens of thousands are now annually finding new homes in the Southern Pacific.* The New South Wales legislature consider, indeed, that voluntary emigration will be largely augmented; that a period has arrived for a complete alteration in the present bounty-system; that the necessity which has hitherto existed to lead intending emigrants, by extraordinary inducements, to select Australia as their home, is no longer in force, as the advantages of the southern colonies are now appreciated by all classes; that an immigration, commensurate with the large and growing requirements of New South Wales, could not be supplied from the territorial revenue according to the present regulations; and that the immigrants introduced at the public expense, are under no obligation to remain in the colony, or to engage in the ordinary industrial pursuits of the colony, which was the justification for the expenditure of the revenue in providing for their free passage: it is therefore proposed, that all male immigrants of the labouring class, not exceeding forty-five years of age, who are conveyed to Australia at the charge of the state, shall, as a preliminary measure, enter into a service-engagement of not less than two years, and should also bind themselves to repay, by equal yearly instalments, a sum of £13 towards their passage-money, of which £1 is to be paid in advance in England, and £12 in New South Wales; no payment to

be required for their wives or any of their children under the age of fourteen years. Unmarried female farm and domestic servants, under thirty-five years of age, to be conveyed on the above terms of repayment and indenture; also, mechanics under forty-five, by payment of £5 in England and £10 in the colony, and indenture for two years; persons above the age of forty-five, pay a proportionately large sum in England, and less in the colony.

With regard to the numerous children of both sexes in the orphan-schools and other eleemosynary establishments in the United Kingdom, it is proposed, that such as should emigrate at the age of thirteen years and upwards, and be of good character, should be indentured for four years; receiving, for the first two years, wages at the rate of £5; and for the second two years, at the rate of £10 per annum: towards the migration of these boys and girls, the colonial revenue would advance £8 per head in aid of the funds provided by the guardians or managers of such eleemosynary institutions in England—the said £8 to be repaid by the employer when the apprentice is indentured to him by the government immigration agent. The committee further recommended, that a sum of £10,000 be held at the disposal of the London Committee of the Family Colonisation Loan Society, presided over by the Earl of Shaftesbury (which has had its origin in the philanthropic exertions of Captain and Mrs. Chisholm); and this has been done. The proposed alterations in the emigration system will require the confirmation of the Imperial Parliament.

The thousands now settling in Australia will yearly send for the struggling members of their families from the United Kingdom, as the Irish have done from America;† and

* New South Wales, Victoria, and South Australia will probably remit half a million sterling to England, in the years 1853-'4, for the promotion of emigration.

† It is a mistake to suppose that the Irish are not a migratory race: for centuries they have been so; and probably Australia may now become with them as favourite a locality as the United States has hitherto been. Sir Francis B. Head, in a recent tour through Ireland, collected some data, and makes the following observations on this interesting subject:—

“From the year 1620, when the Pilgrim Fathers went out, up to the present time, not less than 9,500,000 of Irish have emigrated from England, Ireland, and the Canadas, to the United States of America. From 1806 to 1851, not less than 4,500,000 of the Irish people have emigrated from their native country. From 1841 to 1851, not less than 1,500,000 have left Ireland. In the single year 1851, Irish

emigrants amounted to not less than 257,372; and even from the Clyde, of 14,435 emigrants who, in 1851, sailed to America, more than one-third were Irish. In London, there are more Irish than in Dublin; in Manchester and Salford, more Irish than in Cork; in Glasgow, as many Irish and descendants of Irish as in Belfast. There are more Irish (born in Ireland) now living in Glasgow, than there are living at Belfast Irish who have been born there. Of the Anglo-Saxon and Celtic races abroad, nearly one-half of the whole are Irish.”

In my work on *Ireland before and after the Union*, published first in 1832, and next in 1844, I stated, that nothing but an extensive migration, a famine, or a pestilence, could save the country from agrarian or civil war, owing to the density of population, in proportion to the cultivable area, and still more in regard to the very small amount of capital and circulating medium in the island.

thus a self-supporting migration will be sustained: for few who receive eighteen-pence or two shillings for a day's toil in England will remain, when they know they can obtain thirty to fifty shillings a-week in another part of the empire, with good mutton or beef at twopence to threepence per lb., and the certainty of becoming themselves, by industry and sobriety, small farmers, and even landholders, as soon as the claims of the squatters, and the millions of acres now held by them on lease are adjusted.*

It is not only in the gold-producing colonies that high wages are paid: in South Australia, an agricultural settlement, notwithstanding the advent of 10,000 immigrants during 1853,† equally high rates generally prevailed at the commencement of 1854, and may be expected to continue for several years. When it is considered that the cost of living is less in Australia than in London, with the climate of the south of France, the great boon held out to the skilled artisan, or mere manual toiler, must be evident: by industry, sobriety, and frugality, the man who has health, and a pair of good hands, may lay by something for old age, instead of looking forward to the parish poor-house, as in England; or he may attain a competence, rear a family, and place them in a position to rise above the station of their parents: this, under the present state of things, not one day-labourer in a million could hope to accomplish in England, Ireland, or Scotland.

In New South Wales, there are about 3,500 gold-diggers constantly at work, and their average earnings, throughout 1853, ranged from £150 to £200 per annum, which sum any intelligent, sober mechanic, working six full days in the week, may earn at Sydney or other large towns, and "call no man his master." At Victoria, the average receipts of 35,000 gold-diggers are not so large or steady as in New South Wales; the prizes, however, in the golden

lottery, are greater; but for handicraft or even hewers of wood and drawers of water, there is an immense demand at 8s. to 10s. a-day, many of the public works and buildings projected at Melbourne and Geelong, for which the funds are ready, being nearly at a stand-still for want of labourers.

It is useless, and it should be added, pernicious, to attempt the stoppage of the present *Exodus* from Britain; as well might the owner of a stock of bees endeavour to prevent their swarming in search of a fresh hive, where they would have more scope to build their cells, lay up food for the young, and provide against a cold or a rainy day: a more judicious policy is, to direct the human stream to the unoccupied but fertile fields of another part of *our own empire*, instead of allowing valuable strength to waste at home, or to become the bone and sinew of other states, which may some day be our enemies.

What would be thought of a project to prohibit the population of the Surrey side of the river Thames crossing to the Middlesex shore, and compelling the superabundant and ill-paid labourers to remain in their over-crowded districts, adding daily to the felon array of 25,000 criminals, now annually convicted in the United Kingdom; contributing to the 30,000 orphan and deserted children, which now fill the parish and other eleemosynary asylums; swelling a yearly expenditure of about £12,000,000 out of the national capital for the support of 1,000,000 destitute, infirm, and prematurely-decayed paupers; and dragging down all their fellow-workmen to the lowest pittance on which human life can be sustained: or, if the more energetic and manly-spirited rejected the alternatives of crime—a poor-house, sickness, an old age of suffering and dependence—then leaving them no other course than a migration to America, to Russia, or to any foreign land where they could hope to live in comfort by the sweat

* The state of the crown-lands in Australia will require the early consideration of parliament; and happily, there is now in England one who, as a member of the Legislative Council of New South Wales, and a lawyer of ability, is known to have devoted considerable attention to the subject. This gentleman is at present a member of the British House of Commons, and holds office (as secretary of the India Board) in her Majesty's government. It is, therefore, to be hoped, that the local information and integrity of character of Mr. Robert Lowe, will be rendered available for the equitable compromise of a matter which, the longer it is protracted, must become of more difficult adjustment.

† Mechanics, 14s. to 18s. a-day, without board or lodging; domestic servants—*males*, £50 to £60: *females*, £20 to £30 per annum, with board and lodging; farm-servants, married couples, £45 to £70 per annum, with board and lodging; single men, £50 to £60, with ditto; miners, 6s. to 8s. ditto; painters and glaziers, 8s. to 10s. ditto; plasterers, 14s. to 16s. ditto; sawyers, 15s. per 100 feet; saddlers, 10s. to 12s. per day, without board or lodging; shoemakers, 8s. to 10s. ditto; shepherds, £35 to £50 per annum, with board and lodging; shopmen, £100 to £180 per annum, with board and lodging; tailors, 1s. per hour, without board or lodging; tanners, 10s. to 12s. ditto; wheelwrights, 16s. to 18s. ditto.

of their brow, and look forward to some day when the curse pronounced on original sin might be mitigated, and hopeless toil be changed into a sabbath of rest, preparatory to the final summons, which a youth and manhood of severe and never-ending toil, leaves little time to consider.

There is present safety and future good—there is worldly policy and sound wisdom—there is pure philanthropy and practical Christianity, in directing the stream of migration from Britain to Australia, and other parts of the dominions of our gracious sovereign: were it possible, the ocean which encircles, but connects our maritime empire, ought to be bridged over, and kept free from tolls and obstructions, that all might pass freely to and fro through the territories of the Queen, as they do between England and Ireland. With the extraordinary spread of education taking place among nearly thirty million people, who can predict the consequences to England, if the fullest scope be not given to every energy and faculty of our nature? The rising generation start, in the race of life, from a vantage ground, of which their ancestors had no conception: to keep them pent up within the ideas, hopes, and contentedness which satisfied a past generation, is physically and morally impossible, and at variance with the natural law of human progression.

But if the vast amount of mind now being called into existence, be allowed free scope in the wide-spread domains with which a far-seeing Providence has endowed us, we may faintly perceive the happiness and

* The practicability of forming a canal for the transit of large-sized ships from the Atlantic to the Pacific, is now undergoing investigation; but it is to be feared, that the surveying-parties from England, the United States, and France, are unable to find an available route, the isthmus being more elevated at its shortest points between the two oceans than was expected, and so contorted with mountain chains and ravines as to bid defiance to engineering skill: it is therefore to be anticipated, that the noble project of Sir Charles Fox for a Darien canal, 40 miles long, 30 feet deep, 150 feet breadth at midwater, devoid of locks, and with an excellent harbour at each end, cannot be carried out; but there is still a reasonable possibility of a canal, by Lake Nicaragua, being constructed, which would comprise 56 miles of existing lake-navigation, 90 miles of river, requiring canalization, leaving about 48 miles of canal to be excavated, the whole necessitating locks, and probably detaining for four, five, or even six days the passage of ships from one ocean to the other: but there is nothing in the Nicaragua route to deter Sir C. Fox and his scientific, wealthy, and influential colleagues from turning their energies in this direc-

tion, if the Darien plan be found hopeless. It would be better for ships to endure the detention of a week at the isthmus, and pay 5*s.* a ton tollage, than spend six weeks or two months doubling the Cape of Good Hope or Cape Horn, with the wear and tear, and risk that must be endured in the passage round these stormy, southern headlands. The result of a navigable canal through the isthmus would be like moving the valuable sea-board of the continent of Asia several thousand miles nearer to that of Europe, thus effectually diminishing space and time in international communications.

blessings accruing, not only to our own citizens, but to all who are brought within reach of their influence.

To the statesman, I would humbly say, guide where you cannot control; make the colonies integral parts of the empire, and they will become safety-valves for the preservation of the monarchy; then leave the issue to Him, who never yet deserted the good man, or the righteous nation.

The cutting of a ship-canal through the isthmus of Darien, uniting the Atlantic with the Pacific,* must promote intercourse with Australia as well as with India and China,—expand commercial operations, and strengthen international relations between the eastern and western hemispheres.

A canal that would admit the largest class of vessels, and cost not more than £20,000,000 sterling, would pay, by the transit of two to three million tons of shipping annually. Until this be accomplished, the railroad just completed to Panama will facilitate the passage across the isthmus, and provide an additional route to those now in operation: these may be described as—(1) *Via* Cape of Good Hope, returning by Cape Horn; (2) Isthmus of Darien, and across the Pacific; (3) Mediterranean and Red Sea, by Torres Straits; (4) From the Red Sea, across the Indian Ocean, along the western and southern coasts of Australia.

These various routes suit different classes, and may all be turned to useful account, especially as regards the intercourse between Australia and India, which is of great importance in its political bearings.

Should the yield of gold continue, even

tion, if the Darien plan be found hopeless. It would be better for ships to endure the detention of a week at the isthmus, and pay 5*s.* a ton tollage, than spend six weeks or two months doubling the Cape of Good Hope or Cape Horn, with the wear and tear, and risk that must be endured in the passage round these stormy, southern headlands. The result of a navigable canal through the isthmus would be like moving the valuable sea-board of the continent of Asia several thousand miles nearer to that of Europe, thus effectually diminishing space and time in international communications.

The distances of several routes are stated to be—(1) Tehuantepec (Mexico) route, 198 miles; (2) Nicaragua, from San Juan del Norte to Realejo, 272 miles; (3) Nicaragua to San Juan del Sur, 170 miles; (4) Atrato, by Naipi and Cupica, 172 miles; (5) Chagre to Panama, 51 miles; (6) Darien, from Port Ecosse [Caledonia Bay] to gulf of San Miguel, 39 miles. To Chagre from England, 4,742 miles; from Panama to Sydney, 7,960; Southampton to Sydney, *via* Panama, 12,752; ditto, *via* Marseilles, Suez, &c., 12,010; ditto, *via* Cape of Good Hope, about 14,000—miles.

at the present rate,* it is scarcely possible to predict the beneficial consequences to both Australia and England:† in the latter, an expanding currency would raise the wages of the labouring classes, and induce many, who would otherwise migrate, to be content with the enhanced wages received on the soil of their birth; abundance of capital would cause large investments in remunerative public works, in the drainage of inferior lands, and in the improved tillage of the soil; the taxes required by government would be more easily paid under a full than with a restricted currency,‡ and the interest of the national debt (nearly £30,000,000 a-year) be less onerously felt: a high price and enhanced rental for fixed property, whether vested in land or houses, would reconcile the more stable classes of society to free-trade; the rapidly augmenting demand for manufactures throughout a wide-spread maritime empire would furnish profitable employment to Lancashire and Yorkshire, and to the industrious hives of Birmingham, Glasgow, Belfast, and other large operative towns; thus promoting the shipping interests and the many trades and occupations connected therewith.

In Australia, the golden era must be attended with corresponding advantages—Sydney, Melbourne, and Adelaide become centres of a Christian civilization§—spread-

* There are no means of ascertaining exactly the yield of gold in Australia, since its discovery in June, 1851. The known exports by sea, from the two producing fields, are thus stated:—

Years.	N. S. Wales.	Victoria.	Total.
1851 oz.	144,120	145,128	289,248
1852 „	818,751	1,974,975	2,793,726
1853 „	548,052	2,497,723	3,045,775
Total oz. .	1,510,923	4,617,826	6,128,749

Valuing the ounces of gold at 80s., this shows a known export of £24,972,324. It may be safely assumed, that upwards of a million sterling has been taken out of the colonies by passengers; making a total of seaward transit of about £26,000,000. The quantity conveyed, overland, to South Australia, was probably not less than £20,000,000; and that taken to Van Diemen's Land, about £1,000,000. This brings the figure up to £29,000,000. The metal retained in Australia may be about £4,000,000; which would show a total produce of the value of £33,000,000 sterling to the end of 1853.

† See Preface, p. x.—xii.

‡ The reader desirous of understanding the apparently complex question of currency, will find an interesting, lucid, and philosophical exposition of this important element of political economy and of social life, in *An Essay on Money; its Origin and Use*

from thence, not only over the vast and almost untenanted regions behind the coast-line, but also throughout the countless islands of the Pacific, and along the Asiatic Mediterranean, which stretches from New Guinea, northward, to the beautiful Korean peninsula, to the far-famed isles of Japan, and eventually to India and China.

Who would have dreamed, that the small and struggling settlement for criminals, planted at Sydney Cove towards the close of the last century, and which it was at one time contemplated to remove, from the fear of its perishing by starvation, should become, in so brief a period, the nucleus of an empire of great magnitude?—and who can now prescribe a limit to the power and influence of the Anglo-Saxon and Celtic races thus singularly situated, and providentially furnished with the physical and moral elements best calculated to promote our well-being here and hereafter? May He who rules the destinies of nations, and who has vouchsafed in revelation how happiness can alone be preserved, guide the minds of all concerned in the duty which lies before them,—the one to propagate, and the other to accept, Divine truth, and thus make the colonization of Australia—future as well as present—a substantial blessing to myriads of our fellow-beings throughout the southern and eastern portions of the globe.

(2nd edition, enlarged), by John Taylor, Esq.—a writer whose Christian principles and well-stored mind entitle his observations to the fullest attention, and who has already effected much good, by inducing the legislature and government to recognise at least the fact, that the industry and happiness of the people depend, in a great measure, on the quantity of symbolic money to meet the demands of the state for taxation—to remunerate the labourer, and to facilitate the interchange of commodities.

§ Every mail brings new accounts of projected public works of great magnitude;—railroads, electric-telegraphs, docks, wharfs, and splendid edifices: it is to be hoped that permanently passable roads, though scarcely mentioned, are also in progress. As an instance of these spirited undertakings, I may mention the *Yan-Yean* reservoir, for supplying Melbourne with water, which will be one of the largest in the world, and may almost vie with the *Croton* water-works at New York: the area, covering nearly 15,000 acres, with an average depth of twenty-five feet, is formed on three sides by the natural valley of the river *Plenty*; an embankment on the fourth side will comprise 320,000 cubic feet, faced with stone-work; the water will be conveyed to Melbourne (distant twenty-two miles) in iron pipes, with a bore of two feet six inches, laid underground at a distance of six to seven feet: the fall is 500 feet; so that the highest buildings in the city will be supplied. The contract is under £95,000; and the works are to be completed (if men be obtainable) within eighteen months.

Details.	Four Colonies.*				Total.
	New South Wales.	Victoria.	South Australia.	Western Australia.	
Date of formation A.D.	1787	1836-'7	1836	1829	—
Area in square miles abt.	600,000	90,000	300,000	1,000,000	2,000,000
White population „	220,000	250,000	75,000	10,000	555,000
Number of acres to each person .	1,745	230	2,560	64,000	avg. 2,300
Land in cultivation acres	160,000	50,000	100,000	10,000	320,000
LIVE STOCK:—					
Sheep No.	8,700,000	7,000,000	2,000,000	300,000	18,000,000
Horned Cattle „	1,500,000	600,000	125,000	30,000	2,230,000
Horses „	150,000	35,000	10,000	5,000	200,000
Pigs „	100,000	11,000	5,500	3,500	120,000
Imports, value £	3,000,000	15,000,000	1,800,000	120,000	19,920,000
Exports, value £	4,500,000	11,000,000	1,500,000	35,000	17,035,000
Shipping inwards Tons	250,000	500,000	100,000	25,000	875,000
Wool exported lbs.	16,000,000	20,000,000	3,000,000	500,000	39,000,000
Tallow cwt.	120,000	27,000	2,500	500	150,000
Gold produced 1851-'2-'3 . . . £	7,000,000	26,000,000	10,000	—	33,000,000
Coin and bullion in banks . . . £	3,000,000	4,500,000	1,500,000	20,000	9,020,000
Local revenue £	800,000	1,500,000	150,000	10,000	2,460,000
Land-sales £	4,500,000	1,000,000	320,000	3,500	1,573,500

In portraying the extraordinary riches and resources of these dependencies of the British crown, let us not be unmindful that every grant of power, or talent, or wealth, has a responsibility attached which renders the receiver amenable to a divine tribunal, and involves a punishment for its misuse, which cannot be evaded. Australia has poured into England a renovating life-blood; it has been an invigorating stimulus to mind, as well as to matter: the humblest classes have been familiarised with the daily doings of their fellow-citizens at the Antipodes, and the scope of our social horizon has been enlarged. Every description of industry—commercial, manufacturing, agricultural, and maritime, has been called into full and profitable activity: the capitalist, living on the interest derived from the judicious employment of accumulated hoards, and the labourer, earning daily food from the sweat of his brow, have both been benefited by the prosperity of the colonies; and a hopeful, healthy, cheering spirit has been diffused throughout this wide-spread empire. At the very period when a deadly struggle was drawing nigh with one of the most despotic and powerful governments, which threatened to overwhelm Europe and Asia—when it was indispensable that taxation should be light, the people contented, and our coffers replenished for the purchase of large supplies of food, in consequence of successive deficient harvests—and when statesmen were looking gloomily to the future, all fears were dispelled by the

astonishing products of a region which had once been our shame, but has become our glory—where we had sown in tears, but now reap in joy—and where sin, suffering, and sorrow have been supplanted by virtue, peace, and happiness.

Can this unlooked-for relief and change be a mere natural result of previous causes, or be assigned to an indefinable casualty called *chance*, which in reality is as much at variance with the existence and care of an all-wise, superintending Deity, as it is with the unerring law which pervades the material universe? Why deny to the Creator and Preserver of the world the exercise of a providential interposition for the benefit of His people? Why declare the Almighty to be incapable of using a discriminating dispensation, which man, clothed with a little brief authority, deems his rightful prerogative? Why blind our eyes, and harden our hearts, because we cannot comprehend the designs of the Infinite, whose thoughts are not as our thoughts, nor His ways our ways? Instead of supposing that the acquisition of Australia has been the result of *chance*, or derivable from cunning devices and physical power, let us rather “offer to God the sacrifice of thanksgiving, and tell out His works with gladness;” and while praying to be strengthened against the temptation, and freed from the danger which riches and power engender, rejoice over the manifestations now presented, that England, by means of her colonies, has attained a position unparalleled in the annals of the world,—which will be coeval with the duration of Christian principles and practice.

* Figures are given in round numbers, as the nearest approximation to the existing state of Australia.

APPENDIX OF PUBLIC DOCUMENTS.

Most of the following Returns have been completed by Mr. Edward Deas Thompson, the active and intelligent Secretary of the Colony, who has contributed materially to its prosperity, and to the formation of a well-organized government: they are intended to show the state of New South Wales Proper, for a series of years, irrespective of Victoria or Port Phillip, which province was separated from New South Wales 1st July, 1851:—

Marriages Registered in the Colony from the Year 1837.

Churches in which Solemnised.	1837.	1838.	1839.	1840.	1841.*	1842.*	1843.*	1844.
Church of England . . .	66	553	537	762	697	855	679	673
„ of Scotland . . .	172	230	321	358	418	400	344	322
„ Wesleyan . . .	—	—	7	13	30	46	30	38
„ Independent . . .	—	—	—	—	5	6	7	3
„ Baptist . . .	—	—	—	—	—	—	—	—
„ of Rome . . .	178	172	221	259	410	616	441	432
Jews' Synagogue . . .	—	—	—	—	—	—	—	—
Totals	916	955	1,086	1,392	1,560	1,923	1,501	1,468

Churches in which Solemnised.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.
Church of England . . .	690	681	645	552	656	830	765	860
„ of Scotland . . .	336	357	399	421	499	434	426	522
„ Wesleyan . . .	35	33	43	62	72	73	100	97
„ Independent . . .	8	4	10	8	14	7	8	—
„ Baptist . . .	—	—	—	5	6	3	4	—
„ of Rome . . .	435	398	375	347	353	504	605	664
Jews' Synagogue . . .	—	†5	4	6	3	5	7	7
Totals	1,504	1,478	1,476	1,401	1,603	1,856	1,915	2,150

Births registered in the Colony from the Year 1837. Deaths Registered in the Colony from the Year 1837.

Years.	Males.	Females.	Total.	Years.	Males.		Females.		Total.
					Men.	Children.	Women.	Children.	
1837	1,159	1,111	2,270	1837	937	280	303	279	1,799
1838	1,440	1,377	2,817	1838	983	404	381	321	2,089
1839	1,618	1,575	3,193	1839	1,074	489	445	420	2,428
1840	1,928	1,947	3,875	1840	964	434	402	384	2,184
1841*	2,336	2,219	4,555	1841*	908	626	412	597	2,543
1842*	2,631	2,630	5,261	1842*	1,007	478	375	420	2,280
1843*	2,959	2,815	5,774	1843*	760	508	298	427	1,993
1844	3,325	3,232	6,557	1844	800	442	309	348	1,899
1845	3,531	3,430	6,961	1845	648	415	336	388	1,787
1846	3,377	3,374	6,751	1846	879	500	353	458	2,190
1847	3,645	3,533	7,178	1847	811	606	377	508	2,302
1848	3,576	3,350	6,926	1848	812	484	375	432	2,103
1849	3,803	3,673	7,476	1849	994	632	491	586	2,703
1850	3,705	3,578	7,283	1850	984	629	424	548	2,585
1851	3,893	3,782	7,675	1851	1,026	587	476	511	2,600
1852	4,000	3,866	7,866	1852	—	—	—	—	3,695

* 1841 to 1843.—The return of Births, Marriages, and Deaths having been rendered only to the 30th of September, the number for the last Quarter of these Years has been taken at the average of the three previous Quarters.
 † No information previous to 1846.

[The above returns do not exhibit the whole of the births and deaths in New South Wales, but only those *registered*: they must be considered only as approximative as to the actual mortality, and proportionate number of births to deaths. The marriages are correct returns of all solemnised.]

Population in the Counties and Commissioners' Districts, on 1st March, 1851, classified with reference to Sex and Age—Area, and Proportion of Persons to Square Mile.

Name of Division.	Under 2 Years.		2 and 7 under 14.		7 and 14 under 21.		14 and 21 under 45.		45 and 60 under 60.		60 and upwards.		Total Males.	Total Females.	General Total.	Area in square miles.	Persons to one sq. mile.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.					
COUNTIES.																	
Arxley	202	487	376	256	256	408	478	804	130	30	3,123	2,342	5,465	1,591	3.43		
Bedford	244	515	437	267	1,703	480	92	241	566	140	3,738	2,667	6,405	1,890	3.44		
Bligh	31	84	59	42	348	76	10	68	140	9	650	854	1,504	1,683	0.60		
Brisbane	67	130	117	65	460	176	29	68	126	40	1,014	689	1,703	2,344	0.74		
Camden	402	881	819	483	1,891	706	190	386	913	262	5,372	4,291	9,663	2,188	4.41		
Cook	119	279	321	208	598	295	114	145	326	122	1,634	1,697	3,331	2,665	1.33		
Cumberland	2,488	6,779	6,444	4,085	15,460	4,923	1,735	2,509	6,672	746	42,035	39,079	81,114	1,415	56.13		
Durham	336	730	721	373	1,662	517	75	322	779	38	4,414	3,514	7,928	2,117	3.74		
Georgiana	61	148	114	74	401	112	23	62	153	34	933	592	1,525	1,924	0.79		
Gloucester	128	313	295	195	734	164	42	109	283	12	1,871	1,278	3,149	2,650	1.07		
Hunter	40	93	108	68	178	39	39	35	96	39	622	411	1,033	2,056	0.52		
King	92	264	172	127	581	191	43	91	212	6	1,476	1,029	2,505	1,781	1.41		
Macquarie	51	148	109	74	337	117	66	65	146	11	902	755	1,657	2,220	0.74		
Murray	154	376	312	184	936	306	48	151	335	100	2,316	1,570	3,886	2,248	1.73		
Northumberland	614	1,436	1,361	718	2,982	979	133	590	1,391	87	8,980	6,927	15,907	2,312	6.49		
Phillip	20	60	56	33	182	70	12	22	50	2	433	241	674	1,618	0.42		
Roxburgh	99	242	227	95	610	168	52	95	218	8	1,519	1,019	2,538	1,519	1.67		
St Vincent	95	233	204	129	597	208	34	97	205	210	1,500	1,072	2,572	2,667	0.96		
Wellington	51	139	109	59	441	170	26	60	140	50	495	614	1,109	1,656	0.97		
Westmoreland	57	158	135	82	333	113	34	67	138	7	912	629	1,541	1,592	0.97		
Total in the Twenty Counties	5,347	13,495	12,596	7,617	31,793	10,262	2,959	5,395	13,348	1,136	84,069	70,690	154,759	40,446	3.83		
Stanley (reputed county)	194	356	273	165	1,762	180	25	162	346	9	2,241	1,846	4,787	5,460	0.88		
Total within the Settled Districts	5,541	13,851	12,875	7,782	33,555	10,442	2,984	5,528	13,694	1,145	87,010	72,536	159,546	45,906	3.48		
SQUATTING DISTRICTS.																	
Bligh	38	88	81	45	512	145	16	34	84	2	925	386	1,291	13,020	0.10		
Clarence	48	123	99	71	683	87	5	76	128	1	1,116	605	1,721	9,760	0.18		
Darling Downs	65	89	66	96	1,229	139	20	51	98	2	1,704	469	2,173	25,640	0.08		
Lachlan	116	242	203	135	848	267	50	99	243	9	1,861	1,031	2,892	22,800	0.13		
Liverpool Plains	69	118	132	103	1,106	213	24	56	135	5	1,765	620	2,385	16,901	0.14		
M'Leay	14	18	15	19	132	36	8	15	29	—	242	149	391	3,180	0.12		
Moreno (including Auckland)	163	315	296	214	971	272	52	135	303	11	2,283	1,406	3,689	8,335	0.44		
Moreton (including Stanley)	2	5	11	191	13	4	3	5	7	1	234	38	272	2,460	0.11		
Merumbidgee	149	382	304	196	1,744	283	54	141	342	11	3,112	1,559	4,671	26,897	0.17		
New England	140	308	247	195	1,652	309	44	124	263	3	2,895	1,302	4,197	13,100	0.32		
Wellington	40	120	87	38	616	169	28	46	86	2	1,098	414	1,512	16,695	0.09		
Burnett	17	13	19	70	552	58	5	15	19	—	740	112	852	7,650	0.12		
Macarua	2	2	2	6	56	6	—	4	1	—	74	11	85	12,815	0.01		
Wide Bay	6	19	10	14	233	16	1	3	14	1	319	87	406	5,255	0.08		
Western Lower Darling	3	3	2	4	75	9	—	4	4	—	96	36	132	80,690	0.01		
Eastern Lower Darling	6	13	9	15	161	20	2	9	17	1	226	65	291	11,075	0.07		
Gwydir	18	39	25	33	361	45	8	21	51	1	529	208	737	275,073	0.10		
Total in the Squatting Districts	896	1,903	1,605	1,265	11,142	2,087	321	833	1,825	50	19,219	8,478	27,697	321,379	0.58		
Total in New South Wales	6,437	15,734	14,480	9,047	44,697	12,629	3,305	6,361	15,519	1,195	106,229	81,014	187,243	54,906	3.48		

POLICE DISTRICTS OF NEW S. WALES, AND POPULATION IN 1851. 541

Abstract of the Returns of the Population in the Police Districts, on the 1st of March, 1851.

Police District.	Males.	Females.	Total.
Sydney	30,031	28,962	58,993
Parramatta and Liverpool	5,857	4,962	10,819
Campbell Town, Picton, Narellan, and Camden	3,178	2,554	5,732
Wollongong	1,652	1,447	3,099
Kiama	1,037	884	1,921
Shoalhaven	691	462	1,153
Berrima	1,026	744	1,770
Goulburn	3,399	2,561	5,960
Braidwood	851	578	1,429
Broulee	612	426	1,038
Queanbeyan	1,511	1,015	2,526
Yass	2,005	1,419	3,424
Hartley	940	689	1,629
Penrith	2,133	1,700	3,833
Windsor	3,922	3,359	7,281
Bathurst	4,194	3,025	7,219
Carcoa	1,673	1,039	2,712
Wellington	522	332	854
Mudgee	843	524	1,367
Orange	923	540	1,463
Gosford	790	661	1,451
Newcastle	1,416	1,056	2,472
Raymond Terrace	1,521	1,189	2,710
Wollombi	599	401	1,000
Macdonald River	380	301	681
Dungog	1,201	867	2,068
Maitland	5,462	4,778	10,240
Paterson	1,129	912	2,041
Patrick's Plains	1,393	1,130	2,523
Merton and Muswellbrook	572	396	968
Scone	545	356	901
Murrurundi	317	234	551
Cassilis	521	264	785
Macquarie	902	735	1,637
Port Stephens	597	355	952
Eden	486	291	777
Bombala	613	367	980
Cooma	1,056	673	1,729
Tumut	507	320	827
Gundagai	623	396	1,019
Albury	643	358	1,001
Wagga Wagga	890	406	1,296
Moulamein	807	265	1,072
Binalong	1,209	651	1,860
Balranald	226	65	291
Brisbane	1,897	1,259	3,156
Molong	952	423	1,375
Dubbo	1,217	459	1,676
Tamworth	1,472	546	2,018
Wee Waa	293	74	367
Armidale	1,860	899	2,759
M'Leay	242	149	391
Grafton	523	279	802
Wellinggrove	792	322	1,114
Tabulam	573	317	890
Tenterfield	313	96	409
Warialda	636	231	867
Ipswich	1,278	625	1,903
Warwick	743	227	970
Drayton	809	213	1,022
Burnett	740	112	852
Maranoa	69	11	80
Albert	96	36	132
Wide Bay	319	87	406
Total	106,229	81,014	187,243

Number of Houses, and Social Condition and Number of Inhabitants in the several Cities, Towns, and Villages, and their Suburbs, on the 1st of March, 1851.—(Continued.)

City, Town, or Village.	Houses.							Social Condition.							Total Males.	Total Females.	Total Inhabitants.
	Stone or brick.	Wood.	Shingled.	Slated.	Total.	Finished.	Unfinished.	Inhabited.	Uninhabited.	Married Males.	Single Males.	Married Females.	Single Females.				
Brought forward																	
Maryborough	1,621	1,892	2,989	4	3,513	3,288	289	3,305	222	3,129	7,137	3,187	5,130	10,276	8,373	18,649	
Merriva	—	45	45	—	45	38	7	45	—	45	179	45	30	224	75	249	
Molong west	—	23	12	—	23	19	4	23	—	20	46	22	35	66	57	123	
Monteliores	5	7	1	—	7	7	—	7	—	5	17	5	6	21	11	32	
Moragh	54	129	174	1	333	32	3	33	2	29	200	130	214	390	344	734	
Mudgee	19	29	24	—	48	44	4	48	—	47	114	49	82	161	131	292	
Murrumbidgee	4	9	5	—	13	12	1	13	—	14	33	13	28	47	41	88	
Muswellbrook	16	29	45	—	45	45	—	45	—	34	73	33	64	107	97	204	
Narellan	8	5	13	—	13	13	—	13	—	23	23	16	17	38	33	71	
Newcastle, City and Suburbs	92	61	152	1	153	151	2	153	—	163	409	154	279	572	433	1,005	
Nurea	43	16	46	—	59	56	3	59	—	59	141	61	74	200	335	535	
Orange	3	6	3	—	9	9	—	9	—	10	36	11	18	47	29	75	
Paranatta	3	4	7	—	7	7	—	7	—	8	9	6	5	16	11	28	
Paterson	451	355	766	28	808	732	76	712	96	644	1,544	644	1,296	2,188	1,940	4,128	
Penrith	7	9	16	—	16	16	—	16	—	13	35	13	25	48	38	86	
Pictou	27	45	52	—	72	72	—	72	—	72	132	72	140	204	212	416	
Pitt Town	7	22	29	—	29	28	1	29	—	25	63	25	39	64	39	142	
Queanbeyan	8	40	42	—	48	44	4	48	9	31	81	31	68	111	99	210	
Raymond Terrace	35	35	44	—	70	70	—	70	—	70	143	67	92	213	159	372	
Richmond	10	50	68	—	60	59	1	60	—	57	120	54	82	177	136	313	
Seaham	72	49	121	—	121	121	—	121	—	118	276	120	222	394	342	736	
Seone	—	3	3	—	3	3	—	3	—	3	4	3	9	7	11	18	
Singleton	10	27	37	—	37	35	2	37	—	40	54	38	47	86	86	180	
St. Alban's	50	62	108	—	112	111	1	112	—	88	227	104	211	315	315	630	
St. Albans	2	9	8	—	11	8	3	11	—	8	20	16	22	28	32	60	
Stockton	8	16	16	—	16	16	—	16	—	20	32	16	22	52	38	90	
Tamworth	29	8	32	—	37	37	—	37	—	25	71	25	45	96	70	166	
Tamut	7	36	8	—	44	44	—	44	—	46	120	44	39	168	88	254	
Tarwick	—	—	1	—	8	5	3	8	—	43	124	46	54	167	100	267	
Wagga, north and south	1	5	5	—	6	5	1	5	1	9	23	9	10	32	19	51	
Wariakla	3	18	5	—	21	20	1	20	—	24	93	25	28	117	53	170	
Windsor	—	9	2	—	10	9	—	10	—	9	14	7	15	23	22	45	
Wollongong	288	95	380	—	383	382	1	385	98	211	537	235	452	748	687	1,435	
Wollonbi	68	27	94	—	95	95	—	95	—	83	180	78	160	263	238	501	
Wes. Waa.	—	10	17	—	25	24	—	25	—	20	37	21	27	57	48	105	
Wellington	—	3	2	—	4	4	—	4	—	13	31	11	13	44	24	68	
Yass, north and south	1	8	1	—	8	8	—	8	—	5	14	5	5	19	10	29	
Yass, north and south	—	37	107	—	158	158	—	158	—	99	247	101	131	346	262	608	
Total Population in Country Towns	2,989	3,407	5,483	55	6,417	6,043	374	5,947	470	5,509	12,806	5,585	9,106	18,315	14,991	33,306	
Total Population in Sydney and Suburbs	8,527	2,223	10,133	546	10,750	10,455	295	9,578	1,172	9,327	17,772	9,930	16,895	27,099	26,825	53,924	
Total Urban Population, exclusive of the Military, and of Mariners on board vessels	11,516	5,630	15,616	601	17,467	16,498	669	15,525	1,642	14,836	30,578	15,515	26,301	45,414	41,816	87,230	

Number of Houses, and the Social Condition and Number of Inhabitants in the several Cities, Towns, and Villages, and their Suburbs, on the 1st of March, 1851.

City, Town, or Village.	Houses.						Social Condition.						Total Males.	Total Females.	Total Inhabitants.	
	Stone or brick.	Wood.	Shingled.	Slated.	Total.	Finished.	Unfinished.	Inhabited.	Uninhabited.	Married Males.	Single Males.	Married Females.				Single Females.
Aberdeen	—	5	3	—	5	4	1	5	—	5	9	6	7	14	13	27
Ailsa	—	3	—	—	3	3	—	3	—	—	—	3	3	6	6	14
Appin	4	22	25	—	26	26	15	26	1	16	87	18	46	66	64	130
Arundale	—	88	36	—	99	84	2	98	—	87	242	87	140	329	227	556
Albury	—	54	26	—	79	79	81	83	—	83	180	79	109	263	179	442
Bathurst	377	38	400	—	415	400	17	404	13	367	845	393	647	1,212	1,040	2,252
Brisbane, north, south, and Kangaroo Point	—	261	337	—	343	319	24	324	19	356	870	338	633	1,226	871	2,097
Brisbane, east and west suburbs	14	67	74	—	81	56	25	81	—	81	173	88	109	254	192	446
Braidwood	22	25	35	—	47	46	1	47	—	39	77	38	38	116	96	212
Boyd	6	14	17	1	20	18	2	15	4	4	9	4	4	13	8	21
Bowning	5	5	7	—	10	10	—	10	—	8	18	10	14	26	24	50
Bombalo	16	16	2	—	16	15	1	16	—	20	58	20	25	78	45	123
Berrima	—	20	29	—	36	36	—	36	—	39	64	38	51	103	89	192
Bungandore	3	6	5	—	9	9	—	9	—	8	27	7	21	35	28	63
Bungonia	2	15	11	—	17	13	4	17	—	16	22	17	12	38	29	67
Bimlong	4	14	4	—	18	16	3	18	1	17	60	17	19	77	36	113
Cambden	34	24	49	—	58	56	2	58	—	57	131	54	100	188	154	342
Campbelltown	64	42	104	1	106	99	7	106	—	86	180	86	173	266	267	533
Carcoa	19	32	30	—	51	50	1	51	—	47	113	53	90	169	143	303
Clarence Town	8	22	25	—	30	28	2	30	—	29	78	30	56	107	86	193
Cooma	—	9	—	—	9	9	—	9	—	8	17	8	14	25	22	47
Dalkeith	—	19	8	—	19	18	1	18	—	12	35	14	14	47	32	79
Duagug	—	42	38	—	47	39	8	47	—	44	110	46	86	154	132	286
Drayton	—	35	12	—	35	32	4	36	—	32	104	29	35	136	64	200
Dubbo	—	8	3	—	8	7	1	8	—	8	20	8	11	28	19	47
Eden	3	20	6	—	23	24	1	25	—	20	53	22	25	73	47	120
Emu	1	9	3	—	10	9	1	10	—	13	22	14	12	35	26	61
Gayndah	—	12	22	—	12	9	3	11	1	13	55	13	11	68	24	92
Gesford	2	23	22	—	25	24	1	25	—	37	25	25	29	62	54	116
Goulburn	3	14	14	—	17	17	—	17	—	17	27	18	33	44	51	95
Grafton, north and south	214	82	239	—	296	283	13	251	45	260	573	248	437	833	685	1,518
Gundagai, north and south	—	30	30	—	30	30	3	30	—	35	93	28	37	128	65	193
Gunning	—	25	27	—	25	22	20	25	—	21	48	20	37	69	57	126
Hartley	11	11	17	—	11	11	—	11	1	129	50	58	80	184	138	322
Haydonton	7	6	10	—	22	22	—	22	—	10	40	10	15	50	25	75
Ipswich	6	21	11	—	13	11	2	13	—	54	22	22	31	75	59	134
Kelso	6	144	146	—	27	23	4	27	—	26	18	29	30	39	49	88
Kenpsey	5	56	56	—	142	142	4	156	4	165	365	170	232	530	402	932
Kiama	—	22	13	—	22	22	—	22	—	57	136	58	88	193	146	339
Kiama	—	29	28	—	22	22	—	22	—	16	43	18	46	39	64	123
Liverpool	99	28	113	—	33	23	11	39	—	72	33	33	61	105	94	199
Macquarie	94	32	121	—	126	120	6	107	—	135	74	112	112	206	186	392
Maitland, east and west	120	70	189	1	190	181	9	183	7	184	382	179	354	566	533	1,099
	290	362	627	1	632	631	21	591	61	537	1,109	555	930	1,646	1,485	3,131
Carried forward	1,621	1,892	2,989	4	3,513	3,288	239	3,305	222	3,139	7,137	3,187	5,186	10,276	8,373	18,649

Abstract of the Returns of the Population in the Camities and Commissioners' Districts, on 1st March, 1851, classified with reference to Occupation.

Name of Division.	Com- merce & trade.	Agricul- ture.	Shep- herds, &c.	Stock meat, &c.	Horti- culture.	Other Labour- ers.	Mechan- ics, &c.	Male ser- vants.	Female ser- vants.	Cleri- cal.	Legul.	Medi- cal.	Educa- ted people.	Paupers, &c.	All other occupa- tions.	Residue of popu- lation.	General Total.
COUNTIES.																	
Argyle	510	525	441	118	35	138	93	71	164	12	3	12	48	45	64	3,186	5,465
Bathurst	218	446	668	127	18	384	333	166	224	10	8	9	51	1	225	3,514	6,405
Bligh	20	3	307	33	—	85	39	16	19	—	—	1	9	—	14	458	1,004
Brisbane	49	40	271	56	—	111	86	59	61	3	—	4	13	3	30	939	1,733
Camden	314	1,565	1,069	83	38	600	270	95	234	13	—	15	68	3	87	6,168	9,663
Cook	127	678	19	19	142	142	87	39	63	2	—	—	20	7	77	2,241	3,541
Darling	8,512	2,752	1,53	530	530	4,139	2,316	1,556	3,815	163	168	172	1,440	591	4,446	50,217	81,114
Dumbarland	204	1,368	288	107	52	224	165	96	164	8	—	8	62	10	46	5,134	7,928
Georgiana	92	138	250	126	—	34	75	6	20	—	—	1	5	—	46	840	1,925
Gloucester	97	466	114	70	16	253	73	19	41	2	2	3	17	—	24	1,949	3,149
Hunter	30	170	31	23	2	41	6	27	11	1	—	—	8	—	5	708	1,063
King	31	356	201	92	5	142	84	22	34	—	—	—	3	13	13	1,522	2,505
Macquarie	61	173	18	76	16	89	63	21	44	4	—	7	9	5	72	979	1,637
Murray	89	261	401	96	14	207	164	87	175	8	2	5	16	3	175	2,244	3,886
Northumberland	1,103	1,475	46	91	49	842	384	456	409	25	12	30	141	9	323	9,812	15,207
Phillip	2	23	181	37	1	62	20	5	12	—	—	—	6	—	1	323	674
Roxburgh	43	198	237	70	17	171	71	45	77	—	—	—	17	—	36	1,496	2,538
St. Vincent	40	461	104	87	9	59	81	86	37	2	—	7	20	—	15	1,564	2,572
Wellington	44	314	311	34	6	104	88	34	37	2	—	3	13	—	14	843	1,609
Westmoreland	8	263	113	70	3	60	32	9	32	1	—	—	13	—	21	916	1,541
Total in the Twenty Counties	11,524	11,446	4,273	1,569	835	7,887	4,474	2,915	5,612	256	196	277	1,983	680	5,776	95,056	154,759
Stanley (reputed county)	345	128	461	123	32	330	335	115	254	14	8	17	48	5	140	2,371	4,787
Total within the Settled Districts	11,870	11,574	4,734	1,692	867	8,277	4,809	3,030	5,866	270	204	294	2,031	685	5,916	97,427	159,546
SQUATTING DISTRICTS.																	
Bligh	11	3	463	185	1	120	20	18	6	—	—	1	5	—	17	501	1,291
Clarence	99	13	193	154	6	265	57	33	48	2	—	2	6	2	20	821	1,721
Darling Downs	49	20	726	126	16	237	161	87	73	1	—	2	14	3	16	645	2,173
Leachan	85	62	475	266	13	257	68	37	75	—	2	3	19	—	28	1,504	2,892
Liverpool Plains	31	8	681	355	—	258	63	49	70	1	—	1	14	—	8	844	2,385
McLeay	5	10	5	37	—	62	46	6	9	—	—	—	5	—	25	180	391
Monaro (including Auckland)	49	49	76	497	—	262	146	100	87	2	—	2	25	1	92	1,956	3,689
Moreton (excluding Stanley)	—	138	19	2	2	18	12	3	13	—	—	—	1	—	—	51	272
Morumbidgee	76	62	948	279	9	386	180	258	128	6	1	7	31	—	109	2,191	4,671
New England	74	46	1,252	164	8	327	213	104	120	1	—	7	10	2	41	1,828	4,197
Wellington	9	7	561	170	3	113	26	31	25	—	—	—	9	—	11	547	1,512
Burnett	19	2	421	31	—	121	28	41	20	—	—	4	2	—	7	155	852
Maranoa	—	—	100	8	—	7	—	1	1	—	—	—	3	—	5	16	85
Wide Bay	—	—	96	19	—	6	—	19	10	—	—	1	4	—	2	111	406
Western Lower Darling	1	—	78	2	—	6	—	3	—	—	—	—	—	—	—	41	132
Eastern Lower Darling	—	—	80	53	—	2	—	29	13	—	—	—	—	—	—	80	291
Gwydir	—	—	157	188	—	61	11	9	27	—	—	—	—	—	14	261	737
Total in the Squating Districts	553	324	6,715	2,478	63	2,598	1,048	823	728	13	3	32	157	9	421	11,732	27,697
Total in New South Wales	12,423	11,898	11,449	4,170	930	10,875	5,857	3,853	6,594	283	207	326	2,188	694	6,337	109,159	187,243

CIVIL AND SOCIAL CONDITION OF POPULATION, N. S. WALES—1851. 545

CIVIL CONDITION—1st of March, 1851.

SOCIAL STATE—1st of March, 1851.

Classification.	Males.	Females	Total.
Born in the colony, or arrived free.	81,226	76,695	157,921
Other free persons ¹	22,397	4,232	26,629
Holding tickets of leave	1,986	46	2,032
In government employ	594	32	626
In private assignment	26	9	35
Total	106,299	81,104	187,243

	Males.		Females.	
	Married.	Single.	Married.	Single.
Resident.				
In the Counties	26,300	60,710	26,763	45,773
Squatting Districts	3,702	15,517	3,600	4,873
Total	30,002	76,227	30,363	50,651

Note.—¹ Other free persons refers to those who have been prisoners. The three subsequent classes are still prisoners, but the number is rapidly decreasing.

Abstract of the Returns of the number of Houses, and the Total number of Inhabitants in the Counties and Commissioners' Districts, on the 1st of March, 1851.

Name of Division.	Stone or brick.	Wood.	Shingled.	Slated.	Total.	Finished.	Unfinished.	Inhabited.	Uninhabited.	Total Inhabitants.
COUNTIES.										
Argyle	297	444	371	—	741	708	33	691	50	5,465
Bathurst	462	501	750	—	967	937	30	952	15	6,405
Bligh	11	84	35	—	95	91	4	95	—	1,004
Brisbane	48	209	167	1	257	231	26	256	1	1,733
Camden	260	1,305	653	3	1,620	1,515	105	1,620	—	9,663
Cook	105	510	337	1	616	598	18	613	3	3,541
Cumberland	10,413	5,593	14,184	598	16,080	15,556	524	14,402	1,678	81,114
Durham	124	1,175	819	1	1,299	1,242	57	1,299	—	7,928
Georgiana	9	210	19	—	221	216	5	221	—	1,525
Gloucester	94	522	335	2	616	595	21	599	17	3,149
Hunter	12	193	148	—	205	191	14	205	—	1,063
King	25	309	56	—	336	334	2	335	1	2,505
Macquarie	100	224	196	—	324	302	22	305	19	1,637
Murray	132	477	274	—	610	604	6	573	37	3,886
Northumberland	736	2,061	1,935	5	2,811	2,715	96	2,741	70	15,207
Phillip	9	60	11	—	69	69	—	69	—	674
Roxburgh	112	278	159	—	398	391	7	394	4	2,538
St. Vincent	55	422	148	—	477	472	5	476	1	2,572
Wellington	42	166	62	—	208	200	8	207	1	1,609
Westmoreland	9	206	29	—	240	231	9	240	—	1,541
Total in the Twenty Counties	13,055	14,949	20,688	611	28,190	27,198	992	26,293	1,897	154,759
Stanley (reputed county)	111	607	603	—	718	639	79	699	19	4,787
Total in Settled Districts	13,166	15,556	21,291	611	28,908	27,837	1,071	26,992	1,916	159,546
SQUATTING DISTRICTS.										
Bligh	1	243	16	—	244	243	1	244	—	1,291
Clarence	2	157	102	—	159	139	20	158	1	1,721
Darling Downs	—	159	66	—	164	139	25	164	—	2,173
Lachlan	26	279	58	—	306	280	26	302	4	2,892
Liverpool Plains	14	225	33	—	243	230	13	241	2	2,385
M'Leay	—	52	21	—	52	49	3	47	5	391
Monaroo (including Auckland)	29	444	64	1	477	465	12	460	17	3,689
Moreton (excluding Stanley)	—	11	10	—	11	11	—	11	—	272
Morumbidgee	41	364	87	—	407	391	16	405	2	4,671
New England	21	244	106	—	265	240	25	264	1	4,197
Wellington	3	144	13	—	147	143	4	146	1	1,512
Burnett	—	52	8	—	53	36	17	52	1	852
Maranoa	—	18	4	—	18	18	—	17	1	85
Wide Bay	—	54	54	—	57	47	10	57	—	406
Western Lower Darling	—	13	—	—	13	13	—	13	—	132
Eastern Lower Darling	—	42	3	—	42	42	—	42	—	291
Gwydir	—	95	16	—	96	85	11	96	—	737
Total in Squatting Districts	137	2,596	661	1	2,754	2,571	183	2,719	35	27,697
Total in New South Wales	13,303	18,152	21,952	612	31,662	30,408	1,254	29,711	1,951	187,243

Abstract of the Returns of the Population in the County of Cumberland, on the 1st of March, 1851, classified with reference to Social Condition.

Hundred and Parish.	Social Condition.				Totals.		
	Males.		Females.		Males.	Females.	General Total.
	Married.	Single.	Married.	Single.			
<i>Sydney</i> —							
St. Philip	1,918	3,784	2,083	3,336	5,652	5,419	11,071
St. James	1,108	2,454	1,145	2,267	3,562	3,412	6,974
St. Lawrence	1,102	2,140	1,092	2,067	3,242	3,159	6,401
St. Andrew	1,599	3,077	1,712	2,638	4,676	4,350	9,026
Alexandria	2,574	4,607	2,753	4,826	7,181	7,579	14,760
Botany	100	236	93	152	336	245	581
Petersham	1,318	2,503	1,347	2,156	3,821	3,503	7,324
St. George	160	341	151	250	501	401	902
Concord	195	484	198	335	679	533	1,212
<i>Packenhurst</i> —							
Willoughby	190	346	189	304	536	493	1,029
Gordon	78	197	77	138	275	215	490
Manly Cove	12	28	11	25	40	36	76
Narrabeen	3	6	3	15	9	18	27
Broken Bay	13	30	13	14	43	27	70
<i>Dundas</i> —							
Marramarra	5	18	5	5	23	10	33
Berowra	1	7	1	2	8	3	11
Cowan	3	16	1	2	19	3	22
North Colah	29	78	27	50	107	77	184
South Colah	44	80	46	67	124	113	237
<i>Liverpool</i> —							
Banks Town	50	114	45	85	164	130	294
St. Luke's	157	331	156	259	488	415	903
Minto	40	73	34	34	113	68	181
Holsworthy	33	107	34	67	140	101	241
<i>Woronora</i> —							
Southerland	9	12	7	5	21	12	33
Wattamolla	—	—	—	—	—	—	—
Heathcote	—	—	—	—	—	—	—
Bulga	—	—	—	—	—	—	—
<i>Parramatta</i> —							
Castlehill	75	164	73	124	239	197	436
Field of Mars	439	1,168	407	882	1,607	1,289	2,896
St. John's	370	772	402	765	1,142	1,167	2,309
Prospect	88	209	85	170	297	255	552
Hunter's Hill	198	443	212	309	641	521	1,162
Liberty Plains	41	97	40	92	138	132	270
<i>Bringelly</i> —							
Cabramatta	18	46	17	24	64	41	105
Bringelly	79	215	79	129	294	208	502
Cook	69	145	67	122	214	189	403
<i>Evan</i> —							
Melville	59	163	56	118	222	174	396
Claremont	41	86	38	46	127	84	211
Mulgoa	117	232	110	193	349	303	652
<i>Hardinge</i> —							
Frederick	9	32	11	17	41	28	69
Cornelia	41	95	41	81	136	122	258
Maroota	22	62	24	42	84	66	150
<i>Windsor</i> —							
Nelson	27	69	29	55	96	84	180
Pitt Town	100	239	103	189	339	292	631
Gidley	23	67	23	50	90	73	163
St. Mathew	301	782	317	617	1,083	934	2,017
<i>Richmond</i> —							
Ham Common	219	550	224	450	769	674	1,443
Castlereagh	186	480	188	353	666	541	1,207
Londonderry	25	64	24	50	89	74	163
Rooty Hill	31	91	37	67	122	104	226
<i>Campbelltown</i> —							
Narellan	114	255	118	193	369	311	680
St. Peter's	199	502	211	389	701	600	1,301
Menangle	30	86	29	66	116	95	211
Appin	55	174	57	132	229	189	418
<i>Southend</i> —							
Wedderburn	—	—	—	—	—	—	—
Eckersley	—	—	—	—	—	—	—
Southend	3	8	3	7	11	10	21
Total	13,720	28,315	14,248	24,831	42,035	39,079	81,114

HOUSES AND CLASSIFICATION OF INHABITANTS—SYDNEY, 1851. 547

Abstract of the Returns of the number of Houses and the total number of Inhabitants in the City and Suburbs of Sydney on the 1st of March, 1851.

Name of Ward or Suburb.	Houses.									Total Inhabitants.
	Stone or Brick.	Wood.	Shingled.	Slated.	Total.	Finished.	Unfinished.	Inhabited.	Uninhabited.	
Gipps Ward	1,065	144	1,128	80	1,209	1,191	18	1,131	78	6,862
Brisbane Ward	966	298	1,201	51	1,264	1,241	23	1,135	129	6,220
Bourke Ward	797	104	776	125	901	891	10	827	74	5,456
Philip Ward	1,925	537	2,381	80	2,462	2,444	18	2,139	323	11,600
Macquarie Ward	773	112	795	90	885	882	3	826	59	4,997
Cook Ward	1,588	274	1,753	72	1,862	1,762	100	1,654	208	9,105
Total within the city	7,114	1,469	8,034	498	8,583	8,411	172	7,712	871	44,240
Balmain	192	127	311	6	319	282	37	271	48	1,397
Camperdown	90	30	118	2	120	112	8	95	25	503
Canterbury	14	78	91	1	92	86	6	88	4	473
Chippendale	59	29	87	1	88	81	7	81	7	387
The Glebe	285	66	349	2	351	348	3	302	49	1,575
Newtown	101	89	177	3	190	180	10	169	21	925
O'Connell Town	123	24	146	1	147	142	5	123	24	560
Paddington	221	100	314	1	321	312	9	266	55	1,389
Redfern	175	100	253	22	275	253	22	240	35	1,205
St. Leonard's	98	60	155	3	158	150	8	142	16	737
Surry Hills	55	51	98	6	106	98	8	89	17	533
Total in the suburbs	1,413	754	2,099	48	2,167	2,044	123	1,866	301	9,684
Total, city and suburbs	8,527	2,223	10,133	546	10,750	10,455	295	9,578	1,172	53,924

Abstract of the Returns of the Population in the City and Suburbs of Sydney, on the 1st of March, 1851, classified with reference to Sex and Age.

Name of Ward or Suburb.	Males.					Females.					Totals.		General Total.
	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and upwards.	Males.	Fe-males.	
Gipps Ward	793	484	304	1488	397	791	539	539	1293	234	3466	3396	6862
Brisbane Ward	663	435	306	1350	475	679	471	476	1122	243	3229	2991	6220
Bourke Ward	479	375	313	1209	350	483	434	588	1007	218	2726	2730	5456
Philip Ward	1346	901	561	2112	1041	1321	972	822	2015	509	5961	5639	11600
Macquarie Ward	460	383	355	1032	351	493	360	508	876	179	2581	2416	4997
Cook Ward	1061	742	381	1634	515	1074	776	798	1779	345	4333	4772	9105
Total within the city	4802	3320	2220	8825	3129	4841	3552	3731	8092	1728	22296	21944	44240
Balmain	188	99	62	238	70	171	132	127	254	56	657	740	1397
Camperdown	66	51	23	77	44	70	47	24	76	25	261	242	503
Canterbury	75	46	18	105	21	68	31	24	67	18	265	208	473
Chippendale	55	38	8	70	23	54	36	19	68	16	194	193	387
The Glebe	219	130	62	260	76	209	173	104	299	43	747	828	1575
Newtown	99	79	46	150	88	95	89	73	159	47	462	463	925
O'Connell Town	73	50	19	92	46	73	49	31	93	34	280	280	560
Paddington	209	145	56	211	70	164	126	109	244	55	691	698	1389
Redfern	144	122	60	211	56	157	110	80	219	46	593	612	1205
St. Leonard's	75	48	38	149	57	67	73	69	130	31	367	370	737
Surry Hills	67	40	26	118	35	67	40	40	83	17	286	247	533
Total in the suburbs	1270	848	418	1681	586	1195	906	700	1692	388	4803	4881	9684
Total, city & suburbs	6072	4168	2638	10506	3715	6036	4458	4431	9784	2116	27099	26825	53924

RELIGIOUS STATE—1st of March, 1851 :—Church of England, 93,137; Church of Scotland, 18,156; Wesleyan Methodists, 10,008; other Protestants, 6,472; Roman Catholics, 56,899; Jews, 979; Mahomedans and Pagans, 852; other persuasions, 740. Total, 187,243.

Abstract of the Population in the City and Suburbs of Sydney, on the 1st of March, 1851, classified with reference to Occupation.

Name of Ward or Suburb.	Com- merce & trade.	Agri- culture.	Shep- herds, &c.	Stock- men, &c.	Horti- culture.	Other Labour- ers.	Mechan- ics, &c.	Male servants.	Female servants.	Cleri- cal.	Legal.	Medi- cal.	Edu- cated people.	Paup- ers, &c.	All other occupa- tions.	Residue of popula- tion.	General Total.
Gipps Ward	958	7	5	1	4	285	27	104	360	7	7	10	101	3	668	4,315	6,862
Brisbane Ward	900	4	25	5	8	300	258	114	273	14	1	11	119	5	405	3,778	6,220
Bourke Ward	933	4	23	4	16	142	23	277	581	5	26	39	143	2	301	2,939	5,455
Philip Ward	1,564	12	15	4	22	652	374	153	367	8	8	30	180	512	550	7,149	11,600
Macquarie Ward	794	14	2	1	5	144	367	112	317	52	18	14	80	1	246	2,830	4,997
Cook Ward	1,269	8	10	6	39	358	53	169	596	8	32	21	251	5	347	5,933	9,105
Total within the city	6,118	47	80	21	94	1,881	1,102	929	2,494	91	92	125	874	528	2,517	26,944	44,240
Balmain	144	2	—	—	—	34	6	27	97	6	7	2	67	2	72	931	1,397
Camperdown	54	2	—	—	1	47	8	12	9	—	—	—	3	—	24	343	563
Canterbury	22	2	—	—	2	62	9	4	8	—	—	—	5	—	22	337	473
Chippendale	46	—	—	—	2	24	8	4	6	—	—	—	5	—	25	267	387
The Glebe	125	—	4	—	15	112	38	23	65	1	5	3	25	1	40	1,118	1,575
Newtown	75	4	1	1	36	50	1	43	57	4	4	2	7	—	28	616	925
O'Connell Town	61	—	—	—	3	45	11	7	14	1	2	—	10	—	30	376	560
Paddington	74	1	—	1	19	68	61	26	60	2	8	1	28	2	47	991	1,389
Redfern	142	3	1	1	2	65	1	4	48	2	1	—	51	1	73	810	1,205
St. Leonard's	60	—	—	—	13	34	11	41	72	1	5	3	22	—	39	436	737
Surry Hills	46	2	2	4	19	60	2	9	32	—	4	1	8	—	16	328	533
Total in the suburbs	849	16	8	7	112	601	156	200	468	13	36	12	231	6	416	6,553	9,684
Total, city and suburbs	7,267	63	88	28	206	2,482	1,258	1,129	2,962	107	128	137	1,105	534	2,933	33,497	53,924

NATIONALITY OF POPULATION IN MARCH, 1851.

Country where Born.	Males.	Females.	Total.
In the colony	40,665	40,726	81,391
In England	35,021	16,101	51,122
In Wales	376	182	558
In Ireland	20,440	18,219	38,659
In Scotland	6,531	4,376	10,907
In other parts of the British do- minions	1,118	837	1,955
In Foreign countries	2,078	573	2,651
Total	106,229	81,014	187,243

Convictions for Crime during the year 1851.

CIRCUIT COURTS.—Murder, 6; manslaughter, 6; shooting, stabbing, &c., with intent to do grievous bodily harm, 12; rape, 2; robbery, 13; robbing, be-
ing armed, 8; burglary and house-breaking, 2; stealing in a dwelling, 9; lar-
ceny, 31; receiving stolen goods, 3; house-stealing, 16; cattle-stealing, 9; mali-
ciously wounding cattle, 1; forgery and uttering, 19; bigamy, 1; unnatural
offences, 1. Total felonies, 139.

MISDEMEANORS.—Assaults, 31; riot, 2; perjury, 2; conspiracy, 2; libel, 2;
embezzlement, 2; obtaining money under false pretences, 2; abduction, 3.
Total, 46. Total capital convictions, 8; total executions, 2—1 for murder and
1 for rape.

The felonies tried before the Quarter Sessions, throughout the colony, num-
bered 322, including 3 burglary, 4 housebreaking, and the remainder minor
offences. The misdemeanors numbered 67.

EDUCATION AND SUMMARY OF POPULATION, N. S. WALES—1851. 549

EDUCATION.

State.	Males.	Females.	General total.
<i>Under 21 years of age—</i>			
Cannot read	22,772	22,253	45,025
Read only	8,240	9,593	17,833
Read and write	14,686	15,338	30,024
<i>Above 21 years of age—</i>			
Cannot read	12,475	7,010	19,485
Read only	7,222	6,842	14,064
Read and write	40,834	19,978	60,812
Total	106,229	81,014	187,243

Detailed Educational Abstract.

Age.	Males.				Females.				General total.
	Cannot read.	Read only.	Read and write.	Total.	Cannot read.	Read only.	Read and write.	Total.	
Under 4 years	11,408	160	11	11,579	11,098	203	22	11,323	22,902
4 and under 7 years	7,141	2,784	667	10,592	6,961	2,905	691	10,557	21,149
Under 7 years	18,549	2,944	678	22,171	18,059	3,108	713	21,880	44,051
7 and under 14 years	3,060	4,092	7,328	14,480	2,861	4,440	7,083	14,384	28,864
4 and under 14 years	10,201	6,876	7,995	25,072	9,822	7,345	7,774	24,941	50,013
Under 14 years	21,609	7,036	8,006	36,651	20,920	7,548	7,796	36,264	72,915
14 and under 21 years	1,163	1,204	6,680	9,047	1,333	2,045	7,542	10,920	19,967
7 and under 21 years	4,223	5,296	14,008	23,527	4,194	6,485	14,625	25,304	48,831
4 and under 21 years	11,364	8,080	14,675	34,119	11,155	9,390	15,316	35,861	69,980
Under 21 years	22,772	8,240	14,686	45,698	22,253	9,593	15,338	47,184	92,882
21 and upwards	12,475	7,222	40,834	60,531	7,010	6,842	19,978	33,830	94,361
14 and upwards	13,638	8,426	47,514	69,578	8,343	8,887	27,520	44,750	114,328
7 and upwards	16,698	12,518	54,542	84,058	11,204	13,327	34,603	59,134	143,192
4 and upwards	23,839	15,302	55,509	94,650	18,165	16,232	35,294	69,691	164,341
Total	35,247	15,462	55,520	106,229	29,263	16,435	35,316	81,014	187,243

General Summary.

Summary of Population.	Males.	Females.	Total.
Population of the Colony classified and domiciled	106,229	81,014	187,243
Travellers, not classified nor domiciled, (estimate)	100	58	158
Mariners, &c., on board 89 Colonial Vessels in the Ports of the Colony	533	13	566
Mariners, &c., on board 204 Colonial Vessels at sea	1,220	—	1,220
Military, &c., in barracks and guards	589	175	764
Total belonging to, or within, the colony, 1st March, 1851	108,691	81,260	189,951
Corresponding total of the colony, 2nd March, 1846	94,585	62,145	156,730
Increase during these five years	14,106	19,115	33,221
Centesimal increase during the same period	14.92	30.76	21.20
Centesimal proportion of the sexes in 1841	65.80	34.20	100
" " " 1846	60.35	39.65	100
" " " 1851	57.22	42.78	100
Crews, &c., on board 50 British vessels in the ports of the colony	818	96	914
Crews, &c., on board 9 Foreign vessels in the ports of the colony	134	—	134

Notes.—In the tables of Urban Population, some of the Towns, and some parts and suburbs of Government Townships, are of private formation; but it has not been thought necessary to distinguish them.

Several Towns, possessing only a trifling population, are inserted, in consequence of their having been formerly so shown, or for the sake of future comparison of their present state with their expected advancement.

The contents of the Population Tables for Cities, Towns, and Villages, are comprehended as component parts of the contents shown in the Abstracts for the Counties, the Police Districts, and Parishes, in which such Towns are situated.

The difference between the sum of Slated and Shingled Houses, and the total number of Houses in any District, is made up of Houses covered with Bark or Thatch, and Houses not roofed in. The difference between the total number of Houses, and the sum of houses constructed of Brick or Stone and of Wood, consists of Houses formed of Bark, or other inferior material.

Schools, and Scholars attending the same, in the Colony, from the Year 1840.

Increase and Decrease of the Population of New South Wales, from 1st March to 31st December, 1851; and the total number on the latter date.

Years.	No. of Schools.	Number of Scholars.			Increase and Decrease.	Male.	Female.	Total.	Gen. Total.
		Males.	Females.	Total.					
1840	159	4,639	3,935	8,574	Increase by Immigration	5,799	2,091	7,890	14,286
1841	192	4,935	4,124	9,059	" " Births . . .	3,244	3,152	6,396	
1842	232	5,698	4,635	10,333	Total Increase . . .	9,043	5,242	—	
1843	279	6,286	5,103	11,389	Decrease by Deaths . .	1,344	823	2,167	
1844	313	6,814	5,776	12,590	" " Departure . . .	3,358	1,544	4,902	
1845	327	7,813	6,641	14,454	Total Decrease . . .	4,702	2,367	—	
1846	338	8,613	7,650	16,263	Net Increase	4,341	2,876	—	
1847	376	9,848	8,752	18,600	Population as per Census taken on 1st March, 1851	108,691	81,260	—	
1848	382	10,267	8,722	18,989	Population on 31st December, 1851	113,032	84,136	—	
1849	444	10,721	9,250	19,971				189,951	
1850	493	11,214	10,170	21,384				197,168	
1851	423	11,118	10,002	21,120					
1852	351	13,221	11,170	24,391					

N.B. See *Statistics of Education*, in a previous page.

Number of Schools, &c., in the Year 1851.

Schools.	Number of Schools.	Number of Scholars.			Amount paid by Government from the Colonial Treasury.	Amount received from Voluntary Contributions.	Totals.
		Males.	Females.	Total.			
ORPHAN SCHOOLS—							
Protestant	1	84	80	164	£ s. d.	£ s. d.	£
Roman Catholic	1	90	91	181	1,864 1 10	—	1,864
Total of Orphan Schools . .	2	174	171	345	3,348 2 1	—	3,348
DENOMINATIONAL SCHOOLS—							
Church of England	79	2,692	2,306	4,998	5,321 5 3	2,324 2 7	7,645
Presbyterian	36	1,095	899	1,994	2,063 11 0	1,216 12 9	3,280
Wesleyan	10	507	334	891	588 9 2	665 11 2	1,254
Roman Catholic	35	1,679	1,631	3,310	2,576 15 4	985 17 1	3,562
Secretary to the Board . . .	—	—	—	—	158 19 6	—	158
Total of Denominational Schools	160	5,973	5,220	11,193	10,709 0 3	5,192 3 7	15,901
NATIONAL SCHOOLS—							
Schools	34	1,417	1,444	2,861	5,747 18 7½	1,179 17 3½	6,927
General Management	—	—	—	—	1,018 11 7½	—	1,018
Total of National Schools . .	34	1,417	1,444	2,861	6,766 10 3	1,179 17 3½	7,946
Total of Orphan, Denominational and National Schools }	196	7,564	6,835	14,399	22,687 14 5	6,372 0 10½	29,059
PRIVATE SCHOOLS—							
King's School, Parramatta . .	1	97	—	97	—	—	—
All other	226	3,457	3,167	6,624	—	—	—
Total of Private Schools . .	227	3,554	3,167	6,721	—	—	—
Total of Schools and Scholars	423	11,118	10,002	21,120	—	—	—

In 1852, the total number of denominational schools was 163, with 6,730 male, and 5,827 female scholars. There were also fifty national schools, with 1,998 male, and 1,660 female scholars. The number of children taught in 351 schools amounted, in 1852, to about 11 per cent. on the whole population of the colony. In 1852, government paid for public schools, £31,118, and the amount contributed from private funds was £6,960.

LUNACY AND EXPIRATION OF CONVICTISM IN N. S. WALES. 551

Patients in the Lunatic Asylum, Tarban Creek, Sydney.

Years.	In the Asylum on 31st December.			Admitted during the Year 1851.		Discharged during the Year.				Absconded during the Year.				Died during the Year.		Remaining in the Asylum on 31st December.							
	Male.	Female.	Total.	Male.	Female.	Cured.		Im-proved.		Retaken.		Not Retaken.		Male.	Female.	Supposed Curable.		Supposed Incurable.		Total.			
						Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1851	59	52	111	50	35	18	14	9	18	5	—	1	—	14	4	42	24	25	27	67	51		
1852	67	51	118	70	31	—	—	—	—	1	1	—	—	20	11	38	23	53	28	91	51		

Patients in the free Lunatic Asylum, Parramatta.

Years.	In the Asylum on 31st December			Admitted during the Year.		Discharged during the Year.				Absconded during the Year				Died during the Year.		Remaining in the Asylum on 31st December.							
	Male.	Female.	Total.	Male.	Female.	Cured.		Im-proved.		Retaken.		Not Retaken.		Male.	Female.	Supposed Curable.		Supposed Incurable.		Total.			
						Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1851	56	45	101	8	17	3	3	—	1	—	—	—	—	5	2	5	6	51	50	56	56		
1852	56	56	112	19	18	—	—	—	—	—	—	—	—	—	—	—	—	68	65	68	65		

Patients in the Convict Lunatic and Invalid Establishment, Parramatta.

	In the Establish-ment on 31st December.			Admitted during the Year.		Discharged during the Year.				Absconded during the Year.				Died during the year.		Remaining in the Establish-ment on 31st December.							
	Male.	Female.	Total.	Male.	Female.	Cured.		Im-proved.		Retaken.		Not Retaken.		Male.	Female.	Supposed Curable.		Supposed Incurable.		Total.			
						Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1851 Lunatics	105	22	127	4	—	5	—	—	—	—	—	1	—	3	—	5	2	95	20	100	22		
Invalids	117	10	127	49	15	40	12	8	—	1	—	2	—	7	4	24	1	93	8	117	9		
Totals	222	32	254	53	15	45	12	8	—	1	—	3	—	10	4	29	3	188	28	217	31		

“Memorandum of the number of convicts in the colony of New South Wales on the 1st of December, 1851, showing out of those the probable number who will become free, or who may die, during each year, until the whole of them are disposed of:—Number of convicts in the colony on 1st December, 1851, 1,640; will probably become free or die during the year 1852, 80; remaining in the colony on 31st December, 1852, 1,560; will probably become free or die during the year 1853, 177; remaining in the colony on 31st December, 1853, 1,383; will probably become free or die during the year 1854, 799; remaining in the colony on 31st December, 1854, 584; will probably become free or die during the year 1855, 358; remaining in the colony on 31st December, 1855, 226; will probably become free or die during the year 1856, 78; remaining in the colony on 31st December, 1856, 148; will probably become free or die during the year 1857, 129; remaining in the colony on 31st December, 1857, 19; will probably become free or die during the year 1858, 19.

“These calculations are made without reference to the number of the (lately arrived) ticket-of-leave holders, who, after the 1st of June next, may, with few exceptions, be recommended for conditional pardons, upon the payment of their passage-money, but of which no possible estimate can be made, as only nine out of the whole number have as yet paid the amount required by the regulations. From the foregoing remarks it will be seen that every ticket-of-leave man in the colony, with the exception of those now in the service of government, and those who obtained tickets since the 1st of June, 1850 (in all about 450), would on that date be eligible to be recommended for conditional pardons, and thus rendered free in the colony, if they make the payments required by the regulations, or if those regulations were rescinded.

“Superintendent of Convicts’ Office, Sydney, 1st Dec., 1851.

J. M’LEAN, Principal Superintend.”

Number of Post-Offices, &c., and of Letters, Newspapers, &c., passing through the General Post-Office, in the Colony of New South Wales, from the Year 1838.

Years.	No. of Post-Offices	No. of Persons employed.	Extent of Post Roads. Miles.	Number of Letters.			Number of Newspapers.		Totals.		Income. £	Expenditure. £
				Ship.	Inland.	Town.	Ship.	Inland.	Letters.	Newspapers		
1838	40	52	253,830	No record	253,326	14,967	221,479	297,245	489,772	297,245	8,390	10,357
1839	41	59	277,900	No record	324,046	33,063	*280,025	428,829	357,109	708,854	10,540	13,263
1840	53	73	380,353	157,152	412,283	50,313	264,290	655,788	619,748	920,078	13,413	17,276
1841	56	83	396,688	189,575	473,521	57,072	323,606	803,267	720,168	1,126,873	17,737	18,374
1842	58	83	389,156	186,006	461,617	71,347	297,562	1,380,880	718,970	1,678,442	18,087	19,123
1843	63	86	395,174	180,658	393,007	84,670	240,075	608,609	658,325	848,684	16,566	16,761
1844	65	88	393,926	181,719	329,786	53,623	232,724	559,802	565,128	792,526	14,608	13,157
1845	67	90	412,438	183,184	318,521	39,231	267,264	566,248	540,936	833,512	14,615	12,309
1846	67	90	426,206	188,965	343,337	57,728	328,106	576,563	570,030	904,669	13,895	11,863
1847	71	94	450,022	181,568	400,144	44,606	324,259	625,318	625,412	949,577	14,103	12,256
1848	74	98	479,350	167,080	368,705	49,813	362,494	644,449	+585,598	1,006,943	14,458	15,357
1849	88	115	586,678	178,533	383,353	47,135	277,787	457,197	+609,021	734,984	15,462	13,651
†1850	96	123	686,614	179,406	592,026	70,877	204,601	399,947	842,309	604,548	13,646	15,732
1851	101	137	751,154	202,480	694,356	78,482	248,792	513,515	975,318	762,487	18,252	16,324

* Letters included.

† The decrease in 1848 and 1849, is accounted for by Letters for Port Phillip being sent direct, instead of in the Mails by Post-Office Packets.

‡ In this Year, the Act for the Establishment of an uniform Rate of Postage, and the use of Postage Stamps came into operation, under which no Letters were exempted from Postage, but Petitions to the Queen, the Governor, the Executive, or Legislative Council.

Electoral Roll of each District of New South Wales, under the Act of Council, 14 Victoria, No. 48:—

Average Rate of Wages for different Classes of Labour in Australia during 1851:—

Electoral District.	Number of Electors.	
	1851-'2.	1852-'3.
1 Argyle	157	173
2 Bathurst	256	308
3 East Camden	653	626
4 West Camden	401	406
5 Cook and Westmoreland	407	449
6 Cumberland	1,653	1,643
7 Durham	724	756
8 Gloucester and Macquarie	343	361
9 King and Georgiana . . .	183	192
10 Murray and St. Vincent .	345	351
11 Northumberland & Hunter	763	809
12 Phillip, Brisbane, and Bligh	218	228
13 Roxburgh and Wellington	281	323
14 Stanley (County)	117	126
15 Maneroo	164	159
16 Murrumbidgee	296	296
17 Lachlan and Lower Darling	188	222
18 Wellington and Bligh . .	190	160
19 Liverpool Plains & Gwydir	301	244
20 New England and M'Leay	245	239
21 Clarence & Darling Downs	198	230
22 Moreton Bay, Burnett, } and Maranoa	76*	63*
23 Sydney	5,715	7,038
24 Sydney Hamlets	886	1,004
25 Parramatta	407	574
26 Cumberland Boroughs . .	372	375
27 Western Boroughs	334	325
28 Southern Boroughs	260	238
29 Northumberland Boroughs	472	519
30 North-eastern Boroughs . .	129	136
31 Stanley Boroughs	291	271
Totals	17,025	18,844

Trade or Calling.	Town and Country.	1851.	
		Average wages per diem, without Board and Lodging.	Average wages per annum, with Board and Lodging.
MALES:—			
Carpenters	Town	s. d. 6 5	£ —
	Country	—	42
Smiths	Town	6 8	—
	Country	—	45
Wheelwrights	Town	6 4	—
	Country	—	46
Bricklayers	Town	6 0	—
	Country	—	42
Masons	Town	7 8	—
	Country	—	49
Farm Laborers . . . . .	. . . . .	—	18 to 22
Shepherds . . . . .	. . . . .	—	18 to 23
FEMALES:—			
Cooks (plain) . . . . .	. . . . .	—	16 to 25
Housemaids . . . . .	. . . . .	—	14 to 18
Laundresses . . . . .	. . . . .	—	14 to 18
Nursemaids . . . . .	. . . . .	—	7 to 12
General House Servants . . . . .	. . . . .	—	14 to 18
	—	—
Farm-house Servants . . . . .	. . . . .	—	—
Dairy Women, &c. . . . .	. . . . .	—	13

Since the gold-discoveries, the above rates of wages have, in many instances, been fully doubled, particularly as regards skilled labour and domestic servants. In 1854, mechanics were earning 15s. to 20s., and labourers 8s. to 10s. a-day at Sydney, Melbourne, and Adelaide: domestic servants, male and female, £20 to £60 per annum, with board and lodging.

* No Returns for the Maranoa District.

PRICES OF PROVISIONS AND CLOTHING IN N. S. WALES. 553

Average Prices of Provisions and Clothing in the Colony during 1851 and 1852.

Articles of Consumption.	Quantity.	1851.			1852.		
		£	s.	d.	£	s.	d.
Wheat	Per bushel	0	8	6	0	6	0
Bread, First quality	Per pound	0	0	3 $\frac{1}{2}$	0	0	3 $\frac{1}{2}$
Ditto, Second quality	Ditto	0	0	2 $\frac{3}{4}$	0	0	2 $\frac{3}{4}$
Flour, First quality	Ditto	0	0	3	0	0	3
Ditto, Second quality	Ditto	0	0	2 $\frac{1}{2}$	0	0	2 $\frac{1}{2}$
Rice	Ditto	0	0	4	0	0	4
Oatmeal	Ditto	0	0	6	0	0	6
Tea	Ditto	0	1	4	0	1	4
Sugar	Ditto	0	0	3 $\frac{1}{2}$	0	0	3 $\frac{1}{2}$
Coffee	Ditto	0	1	3	0	1	3
Sago	Ditto	0	0	11	0	0	11
Meat, Fresh	Ditto	0	0	2 $\frac{3}{4}$	0	0	3
Ditto, Salt	Ditto	0	0	2	0	0	2
Butter, Fresh	Ditto	0	1	3	0	1	3
Ditto, Salt	Ditto	0	1	0	0	1	0
Cheese, English	Ditto	0	1	6	0	1	6
Ditto, Colonial	Ditto	0	0	7	0	0	7
Salt	Ditto	0	0	1 $\frac{1}{2}$	0	0	1 $\frac{1}{2}$
Potatoes	Per cwt.	0	6	0	0	6	0
Wine, Colonial	Per gallon	0	4	6	0	4	6
Ditto, Imported, best	Ditto	0	8	0	0	8	0
Brandy	Ditto	1	3	0	1	3	0
Beer, Colonial	Ditto	0	2	6	0	2	6
Ditto, Imported	Ditto	0	5	0	0	5	0
Candles	Per pound	0	0	5 $\frac{3}{4}$	0	0	6
Lamp Oil	Per gallon	0	4	0	0	4	0
Soap	Per pound	0	0	5 $\frac{1}{4}$	0	0	6
Starch	Ditto	0	1	0	0	1	0
Blue	Ditto	0	2	0	0	2	0
Tobacco, Colonial	Ditto	0	3	8	0	4	0
Ditto, Imported	Ditto	0	7	9	0	8	0
ARTICLES OF CLOTHING AND BEDDING.							
<i>Male Clothing:—</i>							
Moleskin Jackets	Each	0	9	0	0	9	0
Ditto Coats	Ditto	0	15	0	0	15	0
Waistcoats	Ditto	0	6	6	0	6	6
Moleskin Trousers	Per pair	0	8	0	0	7	0
Flushing ditto	Ditto	0	8	0	0	8	0
Coloured Shirts	Each	0	2	6	0	2	6
Strong Boots	Per pair	0	9	0	0	9	0
Ditto, Shoes	Ditto	0	7	0	0	7	0
Shepherds' Coats	Each	0	19	0	0	19	0
Socks	Per pair	0	0	10	0	0	10
Handkerchiefs	Each	0	0	9	0	0	8
Straw Hats	Ditto	0	5	0	0	5	0
<i>Female Clothing:—</i>							
Print Dresses	Each	0	6	0	0	5	7
Merino do.	Ditto	0	14	0	0	13	0
Flannel Petticoats	Ditto	0	5	0	0	5	0
Calico do.	Ditto	0	2	2	0	2	2
Stockings	Per pair	0	1	6	0	1	6
Shoes	Ditto	0	6	0	0	6	0
Caps	Each	0	1	9	0	1	9
Shawls	Ditto	0	7	6	0	7	6
Shifts	Ditto	0	2	6	0	2	6
Stays	Per pair	0	6	0	0	6	0
Check Aprons	Each	0	1	2	0	1	2
Straw Bonnets	Ditto	0	5	0	0	5	0
Flannel	Per yard	0	1	2	0	1	3
Calico	Ditto	0	0	6 $\frac{1}{2}$	0	0	6 $\frac{1}{2}$
<i>Bedding:—</i>							
Blankets	Per pair	0	15	0	0	15	0
Sheeting Calico	Per yard	0	1	2	0	1	2
Mattresses	Each	0	8	6	0	8	6
Rugs	Ditto	0	5	0	0	5	0

Immigrants, Assisted and Unassisted, who arrived in the Colony of New South Wales from the 1st January, 1832.

Years.	Immigrants at the Public Expense.				Immigrants at their own Expense.				Total number of Immigrants arrived.				Religion of Immigrants at the Public Expense.				Native countries of Immigrants at the Public Expense.										
	Fourteen Years upwards.		Under Fourteen Years.		Fourteen Years upwards.		Under Fourteen Years.		Fourteen Years upwards.		Under Fourteen Years.		Protes- tants.		Roman Catholics.		Other Religions.		England & Wales.		Scotland.		Ireland.		Other Countries.		
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		
1832	140	455	595	—	197	792	679	251	930	—	—	284	1,214	819	706	1,525	481	2,006	—	—	—	—	—	—	—	—	
1833	177	728	905	—	348	1,253	661	418	1,079	—	—	353	1,432	838	1,146	1,984	701	2,685	—	—	—	—	—	—	—		
1834	52	299	351	—	133	484	519	297	816	—	—	264	1,080	571	596	1,167	387	1,364	—	—	—	—	—	—	—		
1835	33	426	459	—	86	545	518	218	736	—	—	147	883	551	644	1,195	233	1,428	—	—	—	—	—	—	—		
1836	73	595	668	—	140	808	651	212	763	—	—	150	913	624	807	1,431	290	1,721	—	—	—	—	—	—	—		
1837	688	840	1,528	—	1,136	2,664	437	200	637	—	—	176	813	1,125	1,040	2,165	1,312	3,477	—	—	—	—	—	—	—		
1838	1,928	1,673	3,601	—	2,501	6,102	764	438	1,202	—	—	1,328	2,692	2,111	4,803	2,627	7,430	—	—	—	—	—	—	—	—		
1839	2,011	2,764	4,775	1,134	2,177	7,852	1,070	562	1,632	—	—	351	1,983	3,981	3,326	7,307	2,928	9,835	5,215	2,635	2	3,502	1,774	2,575	1		
1840	2,029	2,037	4,066	581	2,177	5,216	890	313	1,143	—	—	163	1,906	2,833	2,350	5,269	3,313	6,322	3,943	1,273	—	—	—	—	9		
1841	4,532	4,800	9,332	1,374	2,836	12,188	841	403	1,244	—	—	354	1,598	5,393	5,203	10,596	3,190	13,786	5,770	6,383	35	3,060	919	8,218	—		
1842	1,931	1,887	3,818	633	1,253	5,071	639	359	1,165	—	—	369	1,534	2,737	2,246	4,983	1,622	6,605	2,998	2,071	2	1,519	334	3,218	—		
1843	801	899	1,700	467	926	2,726	925	192	417	—	—	68	485	1,186	1,021	2,207	1,004	3,211	1,962	763	1	1,238	148	1,340	—		
1844	173	178	351	69	146	497	208	125	333	—	—	128	461	381	303	684	274	958	370	122	4	208	8	281	—		
1846	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1847	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1848	1,514	1,613	3,127	671	1,249	4,376	384	163	547	—	—	75	402	210	117	327	73	402	—	—	—	—	—	—	—	—	
1849	2,637	3,491	6,128	1,110	1,071	8,309	679	391	1,076	—	—	103	515	258	154	412	103	515	3,523	5,027	3,563	8	2,500	659	1,084	133	
1850	1,182	2,223	3,405	331	673	4,078	271	180	451	—	—	42	200	142	40	382	2,603	9,801	6,010	2,297	18	4,572	973	2,378	386		
1851	742	687	1,429	207	417	1,846	389	225	611	—	—	57	108	559	1,453	2,403	3,856	781	4,637	1,393	4,078	—	724	91	3,250	8	
1851	742	687	1,429	207	417	1,846	389	225	611	—	—	142	756	1,131	912	2,043	559	2,602	672	954	220	522	73	1,244	7		
Totals	21,653	25,395	47,248	—	17,559	64,807	10,229	5,411	16,346	—	—	4,032	20,372	32,582	31,006	63,588	21,591	85,179	—	—	—	—	—	—	—	—	9
1832	1,695	1,910	3,545	763	1,436	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

The total number of immigrants introduced into New South Wales at the public expense, from 1832 to December, 1852, was 69,788, comprising 23,288 males, and 27,505 females, above fourteen years of age; and 18,995, of both sexes, under fourteen years of age. The number of immigrants who arrived in the colony at their own expense, during the above-stated period, was 24,153, consisting of 13,406 males, and 613 females, above fourteen years of age; and 4,611, of both sexes, under fourteen years of age. This shows a total immigration, during twenty-one years, of 93,941; viz., 36,694, males and 33,641 females, above fourteen; and 23,606 children under four- teen years of age. The total expenditure of the colony was £1,283,619 sterling.

Candidates for emigration, at the public expense, must be sober, industrious, and of general good moral character, on all which points decisive certificates are required. They must also be in good health, free from all bodily or mental defects, and the adults, in every respect, capable of labour. The most acceptable candi- dates are female domestics and farm-servants, between the ages of twenty and thirty. Separation of husbands and wives, and of parents and young children, not allowed.

Return showing the amount of Assisted and Unassisted Immigration during the several Years between the 1st January, 1838, and the 31st December, 1849.

Years.	Number Landed.				Assisted Immigrants.				Unassisted Immigrants.				Total Number of Assisted & Unassisted Immigrants.	
	In the Sydney District.		In the Port Phillip Dist.		Cost of their Conveyance.				Number Landed.					
	Above 14.	Under 14.	Above 14.	Under 14.	Amount of Passage Money.		Gratuities to Surgeons-Superintendent, Masters, and Officers, Overseers and others.		Above 14.	Under 14.	Above 14.	Under 14.		Total.
					Paid out of Colonial Funds.	Paid by the Immigrants or out of Imperial Funds.	Paid out of Colonial Funds.	Paid out of Imperial Funds.							Total.	Total.
1838	3,601	2,501	—	—	£ 124,512	£ 6,756	£ 6,756	£ 6,756	1,202	126	—	—	1,328	
1839	5,075	2,177	479	85	133,847	10,541	—	10,541	1,632	551	95	55	2,153	
1840	4,066	1,556	1,298	123	100,641	6,217	—	6,217	1,143	163	413	130	1,849	
1841	9,237	2,891	6,153	1,762	313,490	17,477	—	17,477	1,454	286	449	191	2,380	
1842	3,818	1,253	1,304	448	97,568	5,612	—	5,612	1,165	369	490	140	2,164	
1843	—	—	—	—	18	—	—	—	822	145	115	49	1,131	
1844	1,790	936	909	504	60,821	2,986	—	2,986	417	68	50	13	548	
1845	351	145	—	—	6,897	562	—	562	333	128	78	39	468	
1846	—	—	—	—	—	—	—	—	327	75	67	3	472	
1847	3,127	1,240	2,553	976	81,248	6,232	—	6,232	412	103	230	71	816	
1848	6,127	2,182	5,325	2,139	156,196	10,902	422	11,325	547	104	494	74	1,219	
1849	—	—	—	—	—	—	—	—	1,070	422	1,626	449	3,567	
Totals	37,852	14,485	18,009	6,041	1,093,951	67,285	422	67,708	10,524	2,340	4,107	1,234	18,205	

NOTE.—1,326 Male Convicts who arrived in the Middle District, and 199 Exiles who arrived in the Port Phillip District, during the year 1849, are not shown in the above Return. In the amounts of Passage-Money here shown to have been paid out of Colonial Funds, in the years 1841-2, '4 and '5, is included the cost of the Emigrants' selection, which formed part of the Contract. Of the Immigrants who arrived in the years 1838-'9 and 1840, the understated numbers were introduced under the same system:—

Year.	Number.	Amount of Passage-Money.
1838	1,622	£22,398 0 0
1839	2,814	43,010 0 0
1840	3,882	63,773 15 6

[This return includes the Port Phillip, as well as the Sydney or Middle District; and it is not easy to ascertain how many immigrants permanently settled in each district: the return, however, will show the total immigration to both colonies between 1838 and 1849. For each emigrant landed alive in Australia, the surgeon-superintendent on board the government emigration ships received, in addition to a free passage to the colony, a gratuity of £10; third and second voyage, £12; fifth and sixth, £14; seventh and subsequent voyage, £16 per head. To this there was added, in 1851, a gratuity of £40 to provide a passage back to England.]

Money paid out of the Territorial Revenue of New South Wales, on account of Immigration, from 1st January, 1832.

Years	Bounties for the Introduction of Female Immigrants under the direction of the Immigration Board.	Bounties for the Introduction of Immigrants by Private Individuals.	Passages of Mechanics and Labourers forwarded by the Government.	Freight, Victualling, and other Expenses of Vessels Chartered by the Government.	Gratuities to Surgeons-Superintendents, Masters, Overseers, and others.	Pay and Allowances of Surgeon-Superintendents of Vessels chartered by the Government.	Lodging, Maintenance, Conveyances, and other Expenses of Immigrants after arrival.	Salaries and Contingent Expenses of Agents for Immigration in the Colony.	Salaries and Contingent Expenses of the Agent-General for Emigration in England.	Office Expenses of the Land and Immigration Commissioners in England.	Advances from the Colonial Treasury to the Land and Immigration Commissioners.	Remittance on account of Land and Immigration Deposits paid into the Colonial Treasury.	Immigration Remittances under the Regulations of 22nd December, 1848.	Interest on Land and Immigration Deposits.	Outfit and Passages of Clergymen and Teachers.	Expenses of Quarantine.	Total Outlay.	Immigrants, the cost of whose Introduction was paid by the Government.	Immigrants from whom Bounties were disallowed, including Children under the age of one Year.	Clergymen and Teachers.	Total Number of Immigrants*.	Approximate Average Expense per Head.
1832	2,457	—	2,619	—	35	—	181	—	—	—	—	—	—	—	—	—	5,293	792	—	—	792	6
1833	9,585	—	3,591	—	100	—	238	—	—	—	—	—	—	—	—	—	13,588	1,253	—	—	1,253	10
1834	4,020	—	600	—	18	—	433	—	—	—	—	—	—	—	—	—	5,073	484	—	—	484	10
1835	8,043	—	1,125	—	87	—	2,056	—	—	—	—	—	—	—	—	—	11,437	634	—	—	634	18
1836	8,879	—	2,495	—	—	—	562	67	—	—	—	—	—	—	—	—	12,025	719	—	—	719	16
1837	—	9,435	—	21,785	250	3,034	1,832	—	455	—	—	—	—	—	4,440	7,937	49,171	2,669	70	40	2,779	17
1838	—	29,779	—	61,909	2,961	3,410	5,477	454	1,288	—	—	—	—	—	2,820	6,256	107,455	6,159	159	23	6,311	16
1839	—	44,225	—	86,132	1,046	6,127	3,266	889	2,042	—	—	—	—	—	1,400	1,399	146,228	7,882	81	10	7,973	18
1840	—	61,220	—	47,738	1,579	3,182	901	1,541	1,541	1,475	—	—	—	—	1,350	1,452	121,537	5,161	202	9	5,372	22
1841	—	185,272	—	3,357	10,103	2,231	996	723	723	1,475	—	—	—	—	1,550	2,148	207,181	11,353	868	1	12,222	17
1842	—	65,759	—	895	4,088	50	2,684	619	189	1,475	—	—	—	—	600	111	76,473	4,476	595	4	5,075	16
1843	—	7,628	—	—	113	3	118	396	8	308	—	—	—	—	150	146	43,970	2,502	224	1	2,727	16
1844	—	41,818	—	—	2,014	532	386	552	54	—	—	—	—	—	—	131	9,947	437	60	—	497	19
1845	—	8,494	—	—	381	—	—	571	14	—	—	—	—	—	—	134	873	—	—	—	—	—
1846	—	167	—	—	—	—	—	542	—	—	—	—	—	—	—	408	951	—	—	—	—	—
1847	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	734	59,389	4,376	—	—	4,376	—
1848	—	—	—	—	3,256	—	4,157	1,241	—	—	50,000	—	—	—	—	1,180	72,695	8,309	—	—	8,309	—
1849	—	3,942	—	—	5,313	—	3,649	2,257	—	—	56,000	—	352	—	—	447	85,608	4,078	—	—	4,078	—
1850	—	162	—	—	3,291	—	4,976	2,667	—	—	74,000	—	40	—	—	2,173	95,815	1,846	—	—	1,846	—
1851	—	774	—	—	1,361	—	1,390	2,043	—	—	86,468	—	344	—	—	—	—	—	—	—	—	—
Totals	32,984	451,675	10,430	221,816	35,996	18,037	33,747	14,439	6,314	4,793	+266,468	1,241	736	41	11,010	24,736	1,134,303	63,130	2,259	88	65,477	—

* The particulars given under this head have been compiled from information furnished by the Agent for Immigration, together with that obtained from the Accounts of Expenditure in this Office.
 † No complete Account of the Expenditure of these Advances has as yet been received.
 ‡ This Amount consists chiefly of Arrears of the Years 1841 and 1842, which have been taken into account in computing the average Expense per Head for those Years respectively.
 [The average gross cost of emigrants to Australia (despatched by the Government Colonial Emigration Commissioners), including the conveyance of the emigrants from Scotland and Ireland to London and Plymouth, and all expenses in the colony, between August, 1850, and February, 1851, was not quite £13 13s. 3d. per statute adult. During the year 1850, the average gross cost was £14 2s. 5d.]

DEBT OF N. S. WALES CONTRACTED FOR IMMIGRATION.

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State of the Account on 31st December, 1851, of Moneys Borrowed for the purposes of Immigration.

Yea.s.	Amount of Debentures payable in the Colony.		Amount of Debentures payable in London, bearing Interest at the rate of 4d. per £100 per diem.	Amount of Debentures payable either in London or in the Colony, bearing Interest at the rate of 3½d. per £100 per diem.	Total Amount of Debentures.	On what terms sold.		Amount of Premium.	Net Proceeds Realised.	Amount of Debentures paid off.	Amount of Debentures outstanding on 31st December, 1851.	Amount of Interest paid on Land and Immigration Debentures.
	Bearing Interest at the rate of 5½d. per £100 per diem.	Bearing Interest at the rate of 4d. per £100 per diem.				Rate.	Amount of Discount.					
1842	£ 12,500	—	—	—	£ 12,500	At par	—	—	£ 12,500	—	—	£ 2,976
1843	27,000	—	—	—	37,000	2 per cent. discount	740	—	36,260	—	—	2,218
1844	—	2,300	—	—	2,300	At par	—	—	2,300	27,900	—	4,193
1845	—	50,800	—	—	66,100	At par	—	—	66,100	—	—	6,156
1846	—	25,400	—	—	31,800	2 per cent. discount	636	—	31,164	2,500	—	3,800
1847	—	—	—	—	—	—	—	—	—	9,500	—	9,500
1848	—	—	—	—	—	—	—	—	—	88,200	—	88,200
1849	—	—	—	—	—	5 per cent. premium	—	90	1,800	—	—	—
	—	—	—	—	1,800	do.	—	168	5,168	—	—	—
	—	—	—	—	5,000	do.	—	65	2,065	—	—	—
	—	—	—	—	2,000	do.	—	750	25,750	—	50,000	1,316
	—	—	—	—	10,000	do.	—	250	10,250	—	—	—
	—	—	—	—	5,000	do.	—	75	5,075	—	—	—
	—	—	—	—	1,000	do.	—	5	1,005	—	—	—
	—	—	—	—	200	do.	—	200	6,120	—	—	—
	—	—	—	—	6,000	40s. per cent. premium	—	120	4,060	—	—	—
	—	—	—	—	4,000	do.	—	60	2,021	—	—	—
	—	—	—	—	2,000	21s.	—	21	11,009	—	—	—
	—	—	—	—	10,900	do.	—	109	8,064	—	—	—
	—	—	—	—	8,000	do.	—	64	1,006	—	—	—
	—	—	—	—	1,000	18s. 6d.	—	8	1,508	—	—	—
	—	—	—	—	1,500	do.	—	5	1,005	—	—	—
	—	—	—	—	1,000	11s. 3d.	—	10	2,010	—	—	—
	—	—	—	—	2,000	do.	—	2	1,002	—	—	—
	—	—	—	—	1,000	10s. 6d.	—	10	4,010	—	—	—
	—	—	—	—	4,000	5s. 9d.	—	10	1,000	—	—	—
	—	—	—	—	1,000	5s.	—	—	15,100	—	—	—
	—	—	—	—	15,100	do.	—	—	6,060	—	—	—
	—	—	—	—	6,000	22s. per cent. premium	—	66	3,334	—	—	—
	—	—	—	—	3,300	do.	—	14	714	—	—	—
	—	—	—	—	700	41s. 3d.	—	88	5,588	—	—	—
	—	—	—	—	5,500	do.	—	385	30,385	—	—	—
	—	—	—	—	30,100	25s. 8d.	—	12	1,012	—	—	—
	—	—	—	—	1,000	do.	—	43	3,543	—	—	—
	—	—	—	—	3,500	25s. 1d.	—	3	303	—	—	—
	—	—	—	—	300	do.	—	10	1,010	—	—	—
	—	—	—	—	1,000	22s. 6d.	—	343	25,343	—	—	—
	—	—	—	—	25,000	do.	—	31	2,531	—	—	—
	—	—	—	—	2,500	27s. 6d.	—	8	808	—	—	—
	—	—	—	—	800	do.	—	—	338,279	—	187,100	33,782
Total.	39,500	78,500	21,700	187,100	336,800	—	1,376	2,855	149,700	187,100	—	—

Land in Cultivation, and the Produce (exclusive of Gardens and Orchards), from the Year 1837.

Year.	CROPS.								
	Wheat	Maize.	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Sown Grasses, Oats, Wheat and Barley, for Hay.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1837	59,975	18,381	2,551	3,893	493	80	1,165	533	5,054
1838	47,977	25,023	2,922	3,745	429	39	1,768	921	9,939
1839	48,211	22,026	3,480	6,713	483	46	965	424	12,534
1840	72,193	24,966	4,844	4,633	609	115	2,444	381	12,721
1841	56,903	24,922	5,070	4,607	490	47	3,095	308	14,807
1842	62,756	27,256	4,559	1,885	487	99	3,755	215	17,743
1843	73,409	28,984	4,694	1,392	514	42	3,803	652	20,095
1844	74,984	20,652	5,517	2,068	359	41	4,297	869	19,619
1845	76,428	25,296	8,761	1,292	330	36	3,060	483	22,551
1846	73,108	31,647	7,262	2,460	177	81	3,397	228	32,674
1847	63,365	27,103	4,798	2,073	310	82	2,912	67	27,888
1848	67,801	20,220	5,954	4,252	167	14	3,197	201	21,693
1849	66,459	23,316	7,741	2,809	203	18	3,138	458	31,664
1850	70,720	23,170	7,576	2,717	293	42	4,236	510	35,383
1851	82,110	25,017	6,725	2,470	245	54	4,079	731	30,626

Years.	PRODUCE.								
	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Hay.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Cwt.	Tons.
1837	692,620	632,155	51,447	17,119	6,753	695	2,102	2,034	5,627
1838	469,140	556,268	32,103	13,416	4,878	353	3,496	4,952	6,960
1839	802,540	525,507	66,033	27,788	7,008	283	2,601	2,509	25,923
1840	1,066,394	777,947	96,389	39,270	8,863	3,338	10,750	4,300	21,329
1841	784,936	502,603	80,787	25,379	6,507	1,072	7,407	2,570	16,275
1842	798,982	588,774	68,742	18,221	4,451	1,201	6,565	2,004	16,322
1843	896,185	717,758	70,502	21,479	5,145	410	9,459	6,088	25,113
1844	1,170,513	572,567	92,495	26,126	4,475	477	12,134	6,347	24,860
1845	976,365	497,142	136,118	16,825	4,101	775	8,768	3,985	18,975
1846	1,075,804	867,070	146,098	30,927	2,250	1,909	9,299	2,087	33,451
1847	678,072	722,074	58,521	14,346	1,120	778	6,985	725	16,281
1848	1,118,654	258,412	108,816	37,866	2,386	158	7,614	3,059	27,172
1849	1,401,063	276,406	115,379	49,656	2,959	134	8,300	4,238	31,914
1850	921,582	457,102	124,625	53,313	5,529	848	9,400	4,923	44,762
1851	1,407,465	717,053	133,944	49,069	4,891	731	13,644	12,530	36,605

Convictions in the Supreme Court, and Courts of Quarter Session, since 1837.

Year.	Felonies.			Misdemeanors.			Total Number of Convictions.
	Supreme Court.	Courts of Quarter Sessions.	Total.	Supreme Court.	Courts of Quarter Sessions.	Total.	
1837	177	—*	—	12	—*	—	—
1838	199	—*	—	18	—*	—	—
1839	159	582	741	12	113	125	866
1840	99	553	652	9	140	149	801
1841	114	449	563	14	64	78	641
1842	113	429	542	22	72	94	636
1843	107	416	523	22	54	76	599
1844	157	331	488	30	48	78	566
1845	139	303	442	27	51	78	520
1846	113	350	463	38	77	115	578
1847	115	281	396	24	61	85	481
1848	91	269	360	40	45	85	445
1849	148	289	437	28	69	97	534
1850	149	302	451	40	64	104	555
1851	139	322	461	46	67	113	574

* In 1837, 1838 —No Returns by the Clerk of the Peace.

Return of the Population, on the 2nd of March, 1851, in each of the Police Districts of the Colony of Victoria, showing the Population of the Counties comprised within the limits of each District, and the residue of Population of such Districts.

Police Districts	Counties.											Total of Counties.	Residue or Total Population of District.	General total.					
	Bourke.	Grant.	Northmanby.	Follett.	Dundas.	Wihlars.	Ripon.	Hampden.	Hcytesbury.	Polwarth.	Greenville.				Talbot.	Dalhousie.	Angley.	Evenyn.	Mornington.
Melbourne	23,143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23,143	—	—
Bourke	16,819	—	—	—	—	—	—	—	—	—	—	—	—	—	644	885	18,248	—	—
Grant	—	12,784	—	—	—	—	—	—	—	—	—	—	—	—	3	—	12,784	—	—
Portland	—	—	2,125	217	—	—	—	—	—	—	—	—	—	—	—	—	2,342	—	—
Belast	—	—	—	—	—	3,545	—	—	59	—	—	—	—	—	—	—	3,846	—	—
Kilmore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,064	—	—
Albion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	301	—	—
Flooding Creek	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	885	—	—
Mount Macedon	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,512	—	—
Chesham	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,277	—	—
Grange	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,379	—	—
C. Mac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,673	—	—
Balla	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,060	—	—
Horsham	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,497	—	—
Parson's Station	—	—	—	74	555	—	—	—	—	—	—	—	—	—	—	—	2,019	—	—
Total Population in Colony of Victoria	30,962	12,784	2,125	291	1,463	3,987	814	971	343	1,199	400	1,163	3,045	767	614	885	70,846	6,499	77,345

The national origin of the population, in 1851, or country where born, is thus shown:—

CIVIL CONDITION, March, 1851.

Details.	Males.	Pe-males.	Total.
Born in the colony	42,000	20,784	73,790
Other free persons	3,953	336	3,409
Board	—	—	—
Hotting tickets of leave	62	3	65
In government employ	79	—	79
In private assignment	2	—	2
Total	46,202	21,143	77,345

RELIGION, March, 1851.

Church of England	Scotland	Wesleyan Methodists	Other Protestants	Roman Catholics	Jews	Mulomedians and Pagans	Other Persuasions
8,434	3,396	5,340	67	1,668	2,201	10,104	37,433
11,608	4,988	18,014	361	201	424	—	11,608

General Abstract.

EDUCATION, March, 1851.

MALES.	
Under 21 years—	5,020
Cannot read	3,953
Read only	6,139
Read and write	1,180
Above 21 years—	369
Cannot read	2,777
Read only	3,415
Read and write	1,412
FEMALES.	
Under 21 years—	3,198
Cannot read	89
Read only	105
Read and write	151
Above 21 years—	947
Cannot read	146
Read only	3,580
Read and write	4,166

OCCUPATION, March, 1851.

Commerce, Trade, and Manufacture	5,020
Agriculture	3,953
Grain	6,139
Shepherds and persons in the management of sheep	1,180
Stockmen and persons in the management of cattle or horses	369
Horticulture	2,777
Other labourers	3,415
Mechanics and Artificers	1,412
Domestic Servants—	3,198
Male	89
Female	105
Professions—	151
Clerical	947
Legal	146
Medical	3,580
Other educated persons	4,166
Alms-people, pensioners, paupers, &c.	—
All other occupations	—
Residue of population	—

SOCIAL CONDITION, March, 1851.

Sex.	Married.	Single.
Males	12,529	83,073
Females	12,498	18,615
Total	25,027	52,318

HOUSES AND EDUCATIONAL STATE, VICTORIA—MARCH, 1851. 561

Abstract of the Population on the 2nd of March, 1851, in the Colony of Victoria, showing the number of persons who cannot read, can read only, and read and write; also an Abstract of the number and description of Houses.

Police District, City, or Town.	Education.												Houses.										
	Males.						Females.						Total Population.	Stone or brick.	Wood.	Shingled.	Slat- ed.	Total.	Fin- ished.	Unfin- ished.	Inha- bited.	Unin- habited.	
	Under 21 years.		Above 21 years.		Under 21 years.		Above 21 years.		Can- not read.	Read only.	Read and write.	Can- not read.											Read only.	Read and write.
	Can- not read.	Read only.	Read and write.	Can- not read.	Read only.	Read and write.	Can- not read.	Read only.					Read and write.										
Police Districts—																							
Melbourne	2,504	883	1,980	338	6,266	2,477	1,174	2,181	357	571	4,009	23,143	3,955	1,018	3,978	95	4,073	3,982	91	4,062	11		
Bourke	2,332	863	1,271	695	4,707	2,424	853	1,145	468	580	2,197	18,348	611	2,006	2,608	9	2,617	2,518	99	2,609	8		
Grant	1,447	561	961	538	3,407	1,392	604	961	379	446	1,669	12,781	967	1,160	1,718	26	2,014	1,752	292	2,041	3		
Portland	240	112	158	129	752	257	112	122	46	83	263	2,342	42	294	250	—	355	293	42	315	20		
Belfast	460	140	268	221	1,095	429	138	284	95	92	443	3,846	41	497	541	—	541	483	58	541	—		
Kilmore	301	64	127	102	681	157	89	129	51	67	204	2,061	33	210	189	—	242	229	15	242	—		
Alberton	103	25	49	75	325	72	30	50	25	27	92	904	11	128	50	—	141	128	13	141	—		
Flooding Creek	207	76	126	155	1,079	218	40	78	40	47	229	2,542	20	124	137	—	144	102	42	137	7		
Mount Macdon	97	36	95	109	763	115	38	23	30	33	151	1,579	—	55	86	—	86	86	—	86	—		
Chepstowe	150	55	46	174	605	160	58	23	26	34	158	1,673	14	59	62	—	75	64	—	75	—		
Grange	189	81	114	98	561	148	74	74	26	54	200	3,050	27	129	86	1	156	154	2	155	1		
Colac	358	123	160	233	1,075	289	101	112	67	92	290	3,603	24	252	101	—	276	257	19	259	17		
Penalla	171	103	99	165	810	163	70	62	33	47	142	2,019	2	109	17	—	112	106	6	110	2		
Moorham	49	12	23	46	256	49	20	27	6	11	51	629	4	11	11	—	37	37	—	37	—		
Pearson's Station																							
Total in the colony of Victoria	8,915	3,183	5,520	3,140	22,638	8,434	3,393	5,340	1,668	2,201	10,104	77,315	4,864	6,128	9,912	132	10,935	10,237	698	10,866	69		
City of Melbourne, Co. Bourke																							
Bourke Ward	411	137	303	60	1,070	433	194	374	75	79	694	3,868	492	166	649	9	658	658	—	658	—		
Gipps Ward	752	270	498	126	1,772	745	321	537	133	178	1,144	6,633	1,025	191	1,223	6	1,229	1,218	11	1,229	—		
La Trobe Ward	569	181	496	41	1,381	467	221	583	60	97	921	5,012	691	137	786	42	828	828	—	828	—		
Lonsdale Ward	395	129	371	57	1,322	421	211	355	49	108	681	4,181	412	268	650	21	680	678	2	679	2		
Fitzroy Ward	413	154	312	51	721	421	248	315	40	109	635	3,449	429	233	661	17	678	600	78	677	1		
Total in the city of Melbourne	2,504	883	1,980	338	6,266	2,477	1,174	2,181	357	571	4,009	23,143	3,955	1,018	3,978	95	4,073	3,982	91	4,062	11		
Town of Geelong, County Grant																							
Ballemore Ward	168	73	181	31	581	152	87	205	32	43	321	1,915	241	107	337	11	348	316	32	348	—		
Barrow Ward	174	81	104	55	397	189	92	169	42	82	196	1,347	148	145	255	2	295	255	40	295	—		
Kardinia Ward	255	116	159	73	685	509	219	149	178	70	105	322	2,221	316	206	498	5	498	358	80	498	—	
Williamstown Ward	397	101	214	94	600	317	98	240	105	68	378	2,607	305	206	498	4	512	413	69	512	—		
Total in the town of Geelong	904	371	688	236	2,087	877	423	732	249	268	1,218	8,291	911	674	1,461	22	1,593	1,372	221	1,593	—		

Note.—The difference between the number of Slat- ed and Shingled Houses, and the total number of Houses in any District, is made up of Houses covered with Bark or Thatch; and in like manner the difference between the total number of Houses, and the number of Houses constructed of Brick or Stone, and of Wood, is made up of Houses formed of Bark.

Value of Imports and Exports since 1837.

Year.	IMPORTS.							
	From Great Britain.	From British Colonies.		From South Sea Islands.	From Fisheries.	From United States of America.	From Foreign States.	Total.
		New Zealand	Elsewhere.					
£.	£.	£.	£.	£.	£.	£.	£.	
1837	807,264	42,886	142,158	1,764	80,441	9,777	97,932	1,182,222
1838	1,102,127	53,943	183,501	5,548	71,506	8,066	82,112	1,506,803
1839	1,239,600	70,923	313,261	3,863	186,212	23,093	194,697	2,031,649
1840	1,966,280	52,921	200,659	1,348	104,895	24,164	250,383	2,600,650
1841	1,665,277	45,381	124,123	24,361	97,809	35,282	200,503	2,192,736
1842	713,338	37,165	141,302	10,020	64,999	20,117	204,299	1,191,240
1843	920,330	14,471	155,264	22,387	42,579	12,041	200,151	1,367,223
1844	556,879	20,795	75,257	10,624	32,507	17,187	66,949	780,198
1845	624,931	34,094	110,247	40,048	43,503	7,416	125,322	985,561
1846	905,912	23,183	152,064	21,799	56,461	4,459	151,073	1,314,951
1847	1,028,817	26,971	259,678	6,919	41,557	1,550	178,835	1,544,327
1848	840,743	8,982	139,988	2,642	73,715	2,065	114,739	1,182,874
1849	1,014,387	25,244	107,095	3,202	44,516	3,961	115,384	1,313,589
1850	1,070,511	12,385	61,210	31,827	11,052	8,143	138,285	1,333,413
1851	1,152,421	15,609	174,250	6,771	23,033	14,127	177,720	1,563,931
1852	1,395,091	40,124	134,862	4,501	25,770	29,690	270,398	1,900,436

EXPORTS.

	£.	£.	£.	£.	£.	£.	£.	£.
1837	518,951	39,528	106,269	485	54,434	10,617	17,592	747,876
1838	583,154	46,669	85,973	7,137	33,988	11,324	6,525	774,770
1839	570,446	95,173	143,654	1,347	34,729	18,568	7,175	871,092
1840	732,347	215,486	236,585	6,621	27,864	27,885	24,044	1,270,832
1841	628,905	110,105	67,139	13,144	18,417	4,837	41,715	884,262
1842	531,033	127,549	123,358	3,005	22,862	17,101	38,661	863,569
1843	618,789	78,548	136,632	17,934	18,827	—	23,918	894,648
1844	652,053	70,799	114,396	11,528	11,623	—	10,869	871,268
1845	878,330	76,857	112,885	17,656	1,593	—	5,068	1,092,389
1846	805,898	105,531	122,471	13,441	590	—	8,407	1,056,338
1847	936,674	121,195	112,448	14,231	—	—	16,987	1,201,535
1848	901,869	163,938	78,210	6,944	—	—	4,048	1,155,009
1849	898,854	91,255	76,075	10,160	—	55,611	3,989	1,135,941
1850	1,038,340	96,003	97,359	17,537	—	95,473	13,072	1,357,784
1851	1,477,452	94,046	146,805	15,334	—	33,784	29,491	1,796,912
1852	3,607,269	74,759	904,271	6,271	—	5,081	6,383	4,604,034

Value of Imports and Exports since 1844.

Year.	IMPORTS.				EXPORTS.				
	Articles, the Produce or Manufacture of the United Kingdom.	Articles, the Produce or Manufacture of other British Dominions.	Articles, the Produce or Manufacture of Foreign States.	Total.	Articles, the Produce or Manufacture of New South Wales.	Articles, the Produce or Manufacture of the United Kingdom.	Articles, the Produce or Manufacture of other British Dominions.	Articles, the Produce or Manufacture of Foreign States.	Total.
1844	542,970	96,701	140,527	780,198	628,598	111,986	58,482	72,202	871,268
1845	612,912	104,666	267,983	985,561	817,270	92,422	110,060	72,637	1,092,389
1846	878,660	66,896	369,395	1,314,951	791,620	110,272	80,499	73,947	1,056,338
1847	933,364	51,101	559,862	1,544,327	996,909	122,935	15,865	65,826	1,201,535
1848	790,720	52,229	339,925	1,182,874	963,590	114,158	20,054	57,207	1,155,009
1849	900,759	87,892	324,938	1,313,589	964,018	95,789	17,926	58,211	1,135,944
1850	961,364	30,316	341,733	1,333,413	1,158,858	121,099	15,400	62,427	1,357,784
1851	1,109,480	77,013	377,438	1,563,931	1,572,654	124,452	20,550	79,256	1,796,912

SHIPPING—VESSELS BUILT—MEAT IMPORTED—N.S. WALES. 563

Number and Tonnage of Vessels entered Inwards and Outwards since 1837.

Year.		INWARDS.															
		From Great Britain.		From British Colonies.				From South Sea Islands.		From Fisheries.		From United States of America.		From Foreign States.		Total.	
				New Zealand.		Elsewhere.											
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1837	56	21,816	35	5,392	94	21,085	5	581	48	13,004	5	1,220	17	4,262	260	67,360	
1838	102	41,848	36	4,115	106	22,928	6	616	31	7,928	1	271	9	2,351	291	80,060	
1839	128	54,198	48	7,743	107	24,851	7	836	36	9,321	4	1,177	38	11,721	368	109,847	
1840	152	64,933	65	12,009	127	27,462	6	750	27	8,087	8	2,520	62	19,781	447	135,542	
1841	184	76,680	47	7,511	123	22,570	3	358	23	6,163	13	4,754	40	13,242	442	131,278	
1842	92	37,790	79	13,731	97	17,642	19	2,902	20	5,806	7	2,762	77	19,528	391	100,161	
1843	64	27,643	41	5,559	175	28,310	25	4,194	30	7,967	5	1,116	41	10,754	381	85,543	
1844	58	27,417	54	7,189	121	20,367	13	1,831	27	7,888	3	1,005	13	3,222	289	68,919	
1845	58	21,959	61	6,179	117	24,854	24	2,612	37	11,900	1	243	26	6,268	324	74,015	
1846	59	28,619	63	10,613	160	27,209	27	3,005	78	24,191	1	370	30	6,891	418	100,898	
1847	57	25,349	70	10,176	193	37,422	25	2,443	77	22,501	1	160	32	8,968	455	107,019	
1848	71	34,309	106	23,877	233	45,173	23	2,695	63	17,473	1	406	30	7,753	527	131,686	
1849	105	54,641	68	15,732	134	25,792	20	2,804	47	13,226	—	—	40	9,769	414	121,964	
1850	90	48,776	79	14,474	94	19,293	22	2,755	38	10,432	60	17,843	38	12,607	421	126,185	
1851	73	40,867	80	17,577	191	40,190	40	5,643	33	8,430	72	20,473	64	19,822	553	153,002	
1852	111	—	—	—	—	—	32	—	30	—	51	—	50	—	721	197,366	

Year.		OUTWARDS.															
		To Great Britain.		To British Colonies.				To South Sea Islands.		To Fisheries.		To United States of America.		To Foreign States.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1837	43	13,398	44	6,633	91	20,959	—	—	42	10,344	—	—	42	13,262	262	64,596	
1838	35	12,367	36	5,130	83	17,043	5	362	40	10,355	1	289	73	35,749	273	81,325	
1839	36	13,068	76	12,745	122	34,051	7	1,216	28	7,718	2	621	88	35,005	359	104,424	
1840	47	16,687	83	17,111	131	36,504	6	737	22	6,199	4	950	140	51,182	433	129,370	
1841	48	14,592	76	13,776	125	38,414	10	2,002	19	5,053	1	341	183	63,784	462	137,962	
1842	41	12,948	68	11,248	138	31,765	15	2,749	25	7,318	2	705	119	33,972	408	100,705	
1843	51	16,259	52	9,463	172	27,623	42	9,783	21	5,793	—	—	54	18,004	392	86,925	
1844	46	17,044	58	8,590	137	27,593	20	2,657	24	6,724	—	—	37	12,038	322	74,646	
1845	50	19,726	66	8,723	120	23,015	25	2,993	39	11,579	—	—	23	6,811	323	72,347	
1846	41	17,089	74	15,519	163	30,312	28	3,959	73	21,873	—	—	35	11,129	414	99,281	
1847	50	21,267	99	19,156	203	37,915	29	3,383	79	23,645	—	—	48	14,664	508	120,030	
1848	51	21,468	143	34,349	186	42,959	31	5,316	57	16,039	—	—	31	12,097	499	132,228	
1849	49	23,232	76	19,052	145	37,616	25	3,706	46	13,832	46	10,385	60	23,324	447	131,147	
1850	47	24,681	105	22,364	144	38,227	27	4,018	43	27,508	86	27,894	54	32,160	506	176,762	
1851	54	26,694	77	13,920	201	41,821	32	5,513	33	9,658	26	9,457	80	31,957	503	139,020	
1852	49	—	—	—	—	—	27	—	26	—	18	—	52	—	701	175,930	

Vessels Built and Registered since 1837.

Salt Meat Imported since 1837.

Year.	Vessels Built.		Vessels Registered.	
	Number.	Tons.	Number.	Tons.
1837	17	760	36	3,702
1838	20	808	41	6,299
1839	11	763	75	10,668
1840	17	1,196	94	12,153
1841	33	2,037	102	10,992
1842	25	1,297	77	9,173
1843	41	1,237	84	6,657
1844	15	498	81	7,835
1845	15	931	87	8,888
1846	27	1,013	68	4,205
1847	33	2,121	93	8,609
1848	26	1,281	87	6,618
1849	35	1,720	109	7,551
1850	36	1,605	99	7,783
1851	24	939	97	9,181
1852	23	1,582	131	13,188

Year.	Beef, Pork, Bacon, and Hams.	Preserved Meats.	Total Value, as entered in the Returns of Imports.	
			Quantity.	Quantity.
1837	566½ tons.	—	£	25,131
1838	638 tons.	—		28,621
1839	860½ tons.	—		36,008
1840	1,102½ tons.	246 cwt.		81,458
1841	1,984 tons.	292 cwt.		69,184
1842	607½ tons.	64½ cwt.		19,925
1843	919 tons.	20 casks.		17,665
1844	232 tons.	375 casks.		2,393
1845	148 tons.	3 casks.		4,765
1846	5,868 barrels.	5 cwt.		6,964
1847	894 barrels.	144 cases.		3,413
1848	878 casks.	361 cases.		2,660
1849	57½ tons.	65 cases.		1,061
1850	471 casks.	405 cwt.		1,649
1851	267 tons.	97 pack.		3,951
1852	218 tons.	164 pack.		8,317

564 GRAIN IMPORTED AND EXPORTED—FISHERIES—N.S. WALES.

Quantity and Value of Grain, &c., Imported since 1837.

Year.	Wheat.	Maize.	Barley, Oats, and Peas.	Flour and Bread.	Rice.	Potatoes.	Total Value, as entered in the Returns of Imports.
	Bushels.	Bushels.	Bushels.	Pounds.	Pounds.	Tons.	
1837	114,416	3,383	6,222	1,086,587	169,746	525	£. 56,817
1838	79,166	5,860	55,075	875,878	702,346	1,161	53,323
1839	170,871	30,612	54,655	1,802,584	1,359,189	956	248,824
1840	289,736	19,185	24,424	4,404,983	6,776,086	1,085	153,296
1841	236,376	12,773	17,445	9,840,017	3,528,272	239	155,665
1842	139,462	1,020	21,564	3,599,680	2,224,656	1,027	64,285
1843	365,725	583	58,973	4,571,840	1,149,120	541	87,238
1844	226,279	17	16,345	1,599,360	259,840	1,074	41,970
1845	83,664	—	24,848	872,592	422,800	274	22,030
1846	233,552	536	35,261	3,239,936	1,225,728	2,166	53,780
1847	218,877	—	21,996	3,214,400	782,208	1,122	41,034
1848	115,691	—	33,044	1,283,520	680,960	840	25,577
1849	130,599	4,844	48,309	1,831,200	1,525,776	1,104	31,767
1850	54,070	100	47,635	943,522	640,192	657	16,939
1851	140,278	560	10,056	8,320,816	5,073,376	1,869 $\frac{1}{2}$	66,882
1852	108,229	755	185,34	4,576,080	1,619,520	1,056	60,259

Quantity and Value of Grain, &c., Exported since 1837.

Year.	Wheat.	Maize.	Barley, Oats, and Peas.	Flour and Bread.	Potatoes.	Total Value, as entered in the Returns of Exports.
	Bushels.	Bushels.	Bushels.	Pounds.	Tons.	
1837	252	6,748	802	2,048,480	7	£. 21,399
1838	—	8,583	4,340	1,437,538	4 $\frac{1}{2}$	14,543
1839	—	1,401	1,721	874,496	15	15,180
1840	3,726	10,265	645	2,755,200	4	44,825
1841	8,890	27,765	115	444,000	3	25,523
1842	88	3,191	672	3,448,000	11	47,309
1843	20	4,687	1,870	3,146,192	2	13,215
1844	78	26,184	1,798	1,926,624	36	11,503
1845	20	5,334	63	2,648,352	32	13,059
1846	20	1,867	545	3,433,504	3	10,592
1847	—	62,262	3,866	1,458,240	22	13,406
1848	154	27,058	1,300	490,672	1	5,873
1849	—	1,240	1,111	1,184,960	12	6,162
1850	2,693	1,712	19,831	4,715,200	27	21,454
1851	—	54,232	30,340	2,155,636	21	22,856
1852	600	81,444	170,337	9,434,880	52	64,090

Ships and Vessels engaged in the Fisheries that have visited Port Jackson since 1844; distinguishing those that are Colonial, British, or Foreign, with the Tonnage of each description, and Estimated Value of the Cargoes disposed of by the last-mentioned class for payment for Repairs, Refitting, and Refreshment.

Year.	Description of Vessels.						Description and Value of Cargo disposed of by Foreign Ships.			
	Colonial		British.		Foreign.		Sperm Oil.	Black Oil.	Whalebone.	Value.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
1844	13	3,052	3	1,219	12	8,617	Tons. 122	Tons. 152	Cwt. 33	£. 4,993
1845	15	3,444	7	2,685	15	4,345	37	122	147	4,269
1846	16	3,894	9	2,287	55	18,147	203	30	129	6,981
1847	23	5,345	4	1,137	43	13,866	368	192	673	15,804
1848	26	6,103	1	267	37	11,203	158	8 $\frac{1}{2}$	5	4,340
1849	17	4,023	1	430	24	7,417	257	170	40	10,417
1850	14	3,313	3	952	25	7,434	57	63 $\frac{1}{2}$	—	2,208
1851	20	4,556	1	164	12	3,710	439	3	268	17,923

Whalers exempted from Port Charges, 25th February, 1845.

STOCK KILLED—MEAT EXPORTED—HIDES IMPORTED—N. S. W. 565

Salt Meat Exported since 1837.

Year.	Beef, Pork, and Mutton.	Bacon and Hams.	Tongues.	Preserved Meats.	Total Value, as entered in the Returns of Exports.
	Quantity.	Quantity.	Quantity.	Quantity.	£.
1837	592½ tons.	—	14 kegs.	—	14,277
1838	642 tons.	4½ cwt.	—	—	15,090
1839	127½ tons.	—	—	—	5,372
1840	302 tons.	—	—	—	12,263
1841	546 tons.	3¼ cwt.	—	—	17,980
1842	227½ tons.	9 cwt.	—	—	10,053
1843	2,867 casks.	—	—	—	9,307
1844	4,292 casks.	{ 10,065 mutton 100 bacon }	150 in No.	{ 31 cases and 258 lbs. }	12,939
1845	1,142 casks.	94 cwt.	63 casks.	345 packages.	3,506
1846	721 casks.	30 cwt.	12 casks.	12 packages.	2,301
1847	4,345 casks.	218 cwt.	127 casks.	224 packages.	12,289
1848	2,308 casks.	145 cwt.	84 casks.	90 casks.	9,060
1849	192 tons 3 cwt.	284 cwt.	151 casks.	370 cases.	5,446
1850	308 tons.	141 cwt.	218 tons.	4,990 cases.	15,344
1851	221 tons 17 cwt.	246 cwt.	4½ tons.	765 cwt.	9,099
1852	1,121 tons.	3,638 cwt.	3 tons.	1,086 cwt.	17,638

Hides and Leather Imported since 1837.

Year	HIDES.				LEATHER.		Total Value, as entered in the Returns of Imports.
	Horned Cattle.	Sheep and Goats.	Kangaroo and Opossum.	All Other.	Manufactured Boots and Shoes.	Unmanufactured.	
	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.	£.
1837	—	—	75,097 No.	—	543	—	24,457
1838	739 No.	—	44,184 "	—	561	—	22,737
1839	77 "	10 bales.	60,542 "	—	545	—	20,050
1840	{ 31 cases & 8 No. }	77 "	43,418 "	—	757	847	104,292
1841	—	2 "	423 bales.	9 cases.	1,581	83	59,787
1842	—	2 "	491 "	4 cases.	887	39	33,874
1843	10 bdls.	17 bales & 8 No	224 "	75 doz.	1,008	68	33,682
1844	—	26 pkgs.	159 bdls.	—	493	29	17,509
1845	310 No.	6 "	132 bales.	—	321	37	10,392
1846	83 "	37 "	74 "	—	310	42	11,300
1847	319 "	58 "	113 "	—	484	26	14,840
1848	—	49 "	112 "	—	624	32	17,440
1849	—	29 "	89 "	—	907	35	22,043
1850	311 No.	170 bdls.	1,140 No.	—	1,090	34	22,756
1851	{ 1,221 No., & 7 cases }	109 bales.	{ 2,652 No. } { & 8 cases }	—	1,057	92	22,807
1852	500 No.	299 "	1,978 doz.	500 No.	2,630	175	32,271

Live Stock Slaughtered, and Quantity of Tallow and Lard produced from the same, since 1844.

Year.	No. of Boiling-down Establishments.	Sheep Slaughtered.	Horned Cattle Slaughtered.	Tallow Produced.	Hogs Slaughtered.	Lard Produced.
		Number.	Number.	Cwt.	Number.	lbs.
1844	43	127,280	16,891	28,901	388	11,481
1845	52	85,377	36,361	46,834	522	25,323
1846	34	33,538	9,438	16,802	184	7,114
1847	49	128,741	32,012	58,963	54	1,680
1848	55	165,701	33,097	60,842	56	1,865
1849	80	393,071	35,744	85,675	252	29,659
1850	94	292,416	60,385	128,330	45	2,916
1851	75	269,845	42,231	88,145	24	2,000
1852	72	292,000	74,194	147,947	—	12,000

566 TIMBER IMPORTED AND EXPORTED—1837 to 1852—N. S. WALES.

Timber Imported since 1837.

Year.	Deals and Battens.	OTHER TIMBER.					Sandal Wood.	Total Value, as entered in the Returns of Imports.
		Sawn, &c.	Wrought.	Shingles.	Laths.	Paling.		
1837	Quantity. 4,033 No.	Quantity. 651,990 feet	Quantity. —	Quantity. —	Quantity. —	Quantity. —	Tons. —	£. 4,303
1838	6,046 "	{ 96,670 feet and 1 ton }	—	—	—	—	—	3,347
1839	22,946 "	{ 377,960 feet and 130 tons }	—	—	—	—	—	8,260
1840	387,058 feet	756,083 feet	2 houses	—	995 bdl.	—	—	15,254
1841	769,616 "	489,695 "	Sundry pks.	25,000	37,600	—	—	13,192
1842	477,525 "	645,330 "	ditto	50,000	30,000	—	558	11,559
1843	6,087 No.	1,399 "	—	3,000	—	—	107	3,457
1844	2,951 "	{ 1,116 feet & 108 loads }	—	3 loads	—	—	90	1,553
1845	{ 2,901 No. and 256 loads. }	{ 1,260 feet & 541 loads }	—	5,500	—	—	415	6,235
1846	16,364 No.	262,950 feet	—	15½ loads	—	—	44	4,051
1847	1,615 "	456,480 "	—	—	—	—	351	4,426
1848	3,682 "	{ 258,430 feet & 250 loads }	—	—	—	—	50	1,765
1849	6,120 "	{ 362,120 feet & 309 loads }	—	46,000 No.	—	6,000	71	1,891
1850	7,244 "	{ 263,353 feet and 1,934 pieces. }	—	30,000 "	—	20,000	105	2,159
1851	21,687 "	{ 482,903 feet and 2,000 trenails. }	1,068 pks.	318,300 "	58,000	36,890	15	3,721
1852	13,349 "	1,794,472	—	81,000 "	200 bdl.	7,000	—	7,820

Timber Exported since 1837.

Year.	Cedar.	OTHER TIMBER.						Total Value, as entered in the Returns of Exports.
		Sawn, &c.	Wrought.	Shingles.	Laths.	Paling.	Trenails & Spokes.	
1837	Quantity. 116,828 feet	Quantity. 18,828 feet	Quantity. —	No. 163,600	No. —	Bundles —	No 62,989	£. 14,562
1838	699,066 "	9,000 "	—	62,000	—	—	73,450	6,444
1839	729,001 "	{ 823 deals and 15 logs }	—	—	—	—	40,588	8,815
1840	1,250,786 "	151,500 feet	{ 11 houses 2 sashes }	—	50,000	—	4,350	21,750
1841	513,139 "	1,000 "	—	—	—	—	26,890	7,004
1842	522,882 "	27,404 "	—	32,200	—	—	55,644	5,806
1843	944,121 "	{ 10,020 " and 45 blocks }	{ 106 doors and windows }	—	—	—	155,294	9,584
1844	{ 1,222,533 and 214 pieces }	{ 99,500 feet, 193 pieces, 95 loads, 867 bds. btns., &c. }	{ 91 pks. doors, windows, &c. }	—	—	—	105,428	7,989
1845	781,415 feet	{ 71,800 feet & 2,600 billets }	—	89,500	—	—	105,908	7,319
1846	956,515 "	1,495 feet	—	76,500	—	—	113,972	7,460
1847	953,995 "	31,350 "	—	75,500	—	—	163,178	7,158
1848	863,307 "	16,150 "	—	—	—	—	75,901	5,591
1849	1,269,321 "	456,980 "	—	511,140	65,150	3,765	154,717	12,988
1850	715,039 "	1,149,054 "	115 houses	92,900	12,000	2,180	307,141	17,138
1851	1,468,658 "	{ 135,592 and 5 tons }	—	143,000	—	—	318,409	17,462
1852	1,013,775 "	768,549 "	—	8,900	61,800	5,364	209,092	17,330

AN ACT FOR THE BETTER GOVERNMENT OF HER MAJESTY'S AUSTRALIAN COLONIES.
CAP. LIX. [5th AUGUST, 1850.]

Anno Decimo Tertio and Decimo Quarto. Victoriae Reginae.

WHEREAS by an act passed in the sixth year of the reign of her Majesty, intituled "An Act for the Government of New South Wales and Van Diemen's Land,"* it was enacted, that there should be within the colony of New South Wales a Legislative Council, to consist of thirty-six members, and that twelve of the members of the said council should from time to time, in the manner therein mentioned, be appointed by her Majesty, and that twenty-four of the members of the said council should from time to time, in the manner therein mentioned, be elected by the inhabitants of the said colony: and whereas an act was passed in the eighth year of the reign of her Majesty, intituled "An Act to clear up Doubts as to the Regulation and Audit of the Accounts of the Customs in New South Wales,"† and another act was passed in the same year, intituled "An Act to explain and amend the Act for the Government of New South Wales and Van Diemen's Land:‡ and whereas by an act passed in the ninth year of the reign of his late Majesty King George the Fourth, intituled "An Act to provide for the Administration of Justice in New South Wales and Van Diemen's Land, and for the more effectual Government thereof, and for other Purposes relating thereto,"§ his said Majesty, his heirs and successors, were empowered to appoint in Van Diemen's Land a Legislative Council, to consist of such persons, resident in the said colony, not exceeding fifteen nor less than ten, as his Majesty, his heirs and successors, should be pleased to nominate: and whereas the provisions of the last-mentioned act, so far as respects the council of Van Diemen's Land, have been made permanent by the said act of the sixth year of her Majesty: and whereas by an act passed in the sixth year of the reign of her Majesty, intituled "An Act to provide for the better Government of South Australia,"|| her Majesty is empowered, in manner therein mentioned, to constitute within the said colony of South Australia a Legislative Council, consisting of the governor and seven other persons at the least: and whereas by an act passed in the tenth year of the reign of his late Majesty King George the Fourth, intituled "An Act to provide until the Thirty-first Day of December, One thousand eight hundred and thirty-four, for the Government of his Majesty's Settlements in Western Australia on the Western Coast of New Holland,"¶ his said Majesty, his heirs and successors, with the advice of his or their Privy Council, were empowered to make, ordain, and (subject to such conditions and restrictions as to him or them should seem meet) to authorise and empower any three or more persons resident and being within the said settlements to make, ordain, and constitute, laws, institutions, and ordinances for the peace, order, and good government of his Majesty's subjects and others within the said settlements: and whereas the last-mentioned act has been from time to time continued, and ultimately, by an act of the

tenth year of her Majesty,** was continued until the thirty-first day of December, one thousand eight hundred and forty-eight, and to the end of the then next session of Parliament: and whereas it is expedient that the district of Port Phillip, now part of the colony of New South Wales, should be erected into a separate colony, and that further provision should be made for the government of her Majesty's Australian colonies: be it enacted, therefore, by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, that after such provisions as hereinafter mentioned shall have been made by the governor and council of New South Wales, and upon the issuing of the writs for the first election in pursuance thereof, as hereinafter mentioned, the territories now comprised within the said district of Port Phillip, including the town of Melbourne, and bounded on the north and north-east by a straight line drawn from Cape How to the nearest source of the river Murray, and thence by the course of that river to the eastern boundary of the colony of South Australia, shall be separated from the colony of New South Wales, and shall cease to return members to the Legislative Council of such colony, and shall be erected into and thenceforth form a separate colony, to be known and designated as the colony of Victoria.

II. And be it enacted, that the number of members of which, after such separation as aforesaid, the Legislative Council of the colony of New South Wales shall consist, shall, in manner hereinafter mentioned, be determined by the governor and council of New South Wales; and there shall be within and for the colony of Victoria a separate Legislative Council, to consist of such number of members as shall in like manner be determined by the said governor and council; and such number of the members of the Legislative Council of each of the said colonies respectively as is equal to one-third part of the whole number of members of such council, or, if such whole number be not exactly divisible by three, one-third of the next greater number which is divisible by three, shall be appointed by her Majesty, and the remaining members of the council of each of the said colonies shall be elected by the inhabitants of such colony.

III. And be it enacted, that after the proclamation of this act in the colony of New South Wales it shall be lawful for the governor and Legislative Council of such colony, by an act to be for that purpose made and enacted in the manner and subject to the conditions now by law required in respect of acts made and enacted by the said governor and council, to determine the number of members of which, after such separation as aforesaid of the said district of Port Phillip therefrom, the Legislative Council of the colony of New South Wales shall consist, and

* 5 & 6 Vict. c. 76. † 7 & 8 Vict. c. 72.

‡ 7 & 8 Vict. c. 74. § 9 Geo. 4. c. 83.

|| 5 & 6 Vict. c. 61. ¶ 10 Geo. 4. c. 22.

** 9 & 10 Vict. c. 35.

also to determine the number of members of which the Legislative Council of the said colony of Victoria shall consist, and also to make all necessary provisions for dividing the territories which after such separation will be comprised within the colony of New South Wales into convenient electoral districts, or for continuing such of the existing electoral districts as shall be deemed convenient, and for appointing and declaring the number of members of the council of the colony of New South Wales after such separation to be elected for each such district, and for dividing the territories to be comprised in the colony of Victoria into convenient electoral districts, and for appointing and declaring the number of members of the council of the colony of Victoria to be elected for each such district, and for the compilation and revision of lists of all persons qualified to vote at the elections to be holden within the several districts of the said colonies, respectively, and for the appointing of returning officers, and for the issuing, executing, and returning of the necessary writs for such elections, and for taking the poll thereat, and for determining the validity of all disputed returns, and otherwise for ensuring the orderly, effective, and impartial conduct of such elections; provided that the writs to be issued for the first election of members of the Legislative Council of the colony of Victoria shall be issued by the governor of New South Wales or by such person as her Majesty for that purpose, by warrant under her Royal Sign Manual, countersigned by one of her Majesty's principal secretaries of state, shall appoint.

IV. And be it enacted, that every man of the age of twenty-one years, being a natural-born or naturalised subject of her Majesty, or legally made a denizen of New South Wales, and having a freehold estate in possession situate within the district for which his vote is to be given, of the clear value of £100 sterling money above all charges and incumbrances in any way affecting the same, of or to which he has been seised or entitled, either at law or in equity, for at least six calendar months next before the date of the writ of such election, or in case a registration of electors shall be established next before the last registration of electors, or, being a householder within such district, occupying a dwelling-house of the clear annual value of £10 sterling money, and having resided therein six calendar months next before such writ or registration as aforesaid, or holding at the date of such writ or at the time of such registration a licence to depasture lands within the district for which his vote is to be given from the government of New South Wales, or having a leasehold estate in possession situate within such district of the value of £10 sterling money per annum, held upon a lease which at the date of such writ or at the time of registration has not less than three years to run, shall be entitled to vote at the election of a member of the Legislative Council: provided always, that no man shall be entitled to vote who has been attainted or convicted of treason, felony, or other infamous offence in any part of her Majesty's dominions, unless he have received a free pardon or one conditional on not leaving the colony for such offence, or have undergone the sentence passed on him for such offence; and provided also, that no man shall be entitled to vote unless at the time of such election or registration of electors (as the case may be) he shall have paid up all rates and taxes which shall have become payable by him as owner or leaseholder in respect of

such estate, or as occupier in respect of such occupancy, or as the holder of a licence in respect of such licence, except such as shall have become payable during three calendar months next before such election or registration respectively.

V. And be it enacted, that upon the issuing of such writs for the first election of members of the Legislative Council of the said colony of Victoria such colony shall be deemed to be established, and the legislative authority of the governor and council of New South Wales, and the powers of such governor, over and in respect of the territories comprised in the said colony of Victoria and the revenues thereof, shall cease.

VI. And be it enacted, that, subject to the provisions herein contained, the provisions of the said firstly-recited act of the sixth year of the reign of her Majesty, as explained and amended by the said acts of the eighth year of her Majesty, shall remain applicable to the said colony of New South Wales after such separation as aforesaid, and to the governor and Legislative Council thereof.

VII. And be it enacted, that it shall be lawful for the legislatures now by law established within the colonies of Van Diemen's Land and South Australia respectively, by laws or ordinances to be for that purpose made and enacted in the manner and subject to the conditions now by law required in respect of laws or ordinances made by such legislatures, to establish within the said colonies of Van Diemen's Land and South Australia respectively a Legislative Council, to consist of such number of members, not exceeding twenty-four, as they shall think fit; and that such number of the members of each council so to be established as is equal to one-third part of the whole number of members of such council, or if such whole number be not exactly divisible by three such number as is next greater than one-third of the whole number, shall be appointed by her Majesty, and the remaining members of such council shall be elected by the inhabitants of the colony in which such council shall be established; and it shall be lawful for such legislatures respectively, by such laws or ordinances as aforesaid, to make all necessary provisions for dividing the said colony of Van Diemen's Land and the said colony of South Australia into convenient electoral districts, and for appointing and declaring the number of members of council to be elected for each such district, and for the compilation and revision of lists of all persons qualified to vote at the elections to be holden within such districts, and for the appointing of returning officers, and for the issuing, executing, and returning of the necessary writs for such elections, and for taking the poll thereat, and for determining the validity of all disputed returns, and otherwise for ensuring the orderly, effective, and impartial conduct of such elections.

VIII. And be it enacted, that immediately after the issue of the writs for the first election of members of a Legislative Council for Van Diemen's Land established by law or ordinance under the powers herein contained, such of the provisions of the acts herein recited or referred to, or any of them, as relate to the constitution, appointment, and powers of a council in Van Diemen's Land, shall be repealed; and immediately after the issue of the writs for the first election of members of a Legislative Council for South Australia established by law or ordinance under the powers herein contained, such of the provisions of the secondly herein recited act of the

sixth year of the reign of her present Majesty as relate to the constitution, appointment, and powers of a council in South Australia shall be repealed.

IX. And be it enacted, that upon the presentation of a petition signed by not less than one-third in number of the householders within the colony of Western Australia, praying that a Legislative Council according to the provisions of this act be established within such colony, and that provision be made for charging upon the revenues of such colony all such part of the expenses of the civil establishment thereof as may have been previously defrayed by parliamentary grants, it shall be lawful for the persons authorised and empowered to make, ordain, and establish laws and ordinances for the government of the said colony, by any law or ordinance to be made for that purpose, subject to the conditions and restrictions to which laws or ordinances made by such persons are now subject, to establish a Legislative Council within such colony, to consist of such number of members as they shall think fit, and such number of the members of such council as is equal to one-third part of the whole number of members of such council, or if such number be not exactly divisible by three, one-third of the next greater number which is divisible by three, shall be appointed by her Majesty, and the remaining members of the council shall be elected by the inhabitants of the said colony; and it shall be lawful for such persons as aforesaid, by such law or ordinance as aforesaid, to make all necessary provisions for dividing Western Australia into convenient electoral districts and for appointing and declaring the number of members of council to be elected for each such district, and for the compilation and revision of lists of all persons qualified to vote at the elections to be holden within such districts, and for the appointing of returning officers, and for the issuing, executing, and returning of the necessary writs for such elections, and for taking the poll thereat, and for determining the validity of all disputed returns, and otherwise ensuring the orderly, effective, and impartial conduct of such elections; provided that no law or ordinance establishing such Legislative Council within the said colony of Western Australia shall have any force or effect unless provision be thereby made for permanently granting to her Majesty, her heirs and successors, out of the revenues of the said colony, towards defraying such of the expenses of the establishments of the said colony as may have been previously defrayed in whole or in part by parliamentary grants, a yearly sum not less in amount than the sum which may have been lastly before the making of such law or ordinance authorised by parliament to be issued and applied out of the aids or supplies granted by parliament to defray the charge for one year of the said colony, and for raising the yearly sum so granted by means of sufficient taxes, duties, rates, or imposts to be levied on her Majesty's subjects within such colony.

X. And be it enacted, that the said recited act of the tenth year of the reign of King George the Fourth shall be revived and continue in force until the issue of the writs for the first election of members of the Legislative Council of the said colony of Western Australia, and from and after the issuing of such writs such act shall be repealed; and all laws, institutions, and ordinances made, ordained, and established, and all other acts done, in the said colony of Western Australia, by the persons authorised and empowered, or who if the said recited act

had not expired would have been authorised and empowered, in that behalf, shall be and be deemed to have been as valid and effectual as if this act had passed before the expiration of the said recited act.

XI. And be it enacted, that it shall be lawful for the governor and Legislative Council of the colony of New South Wales, after the separation of the colony of Victoria therefrom, and also for the governors and Legislative Councils of the said colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia respectively, after the establishment of Legislative Councils therein under this act, from time to time by any act or acts to establish new electoral districts in any parts of the said colonies respectively, and to alter the divisions and extent of the electoral districts of the said colonies, and to alter and appoint the number of members of council to be chosen by the said districts, and to increase the whole number of members of such Legislative Councils respectively, and to alter and regulate the appointment of returning officers, and make provision in such manner as they may deem expedient for the issue and return of writs for the election of members to serve in such Legislative Councils respectively, and the time and place for holding such elections: provided always, that where the whole number of members of council shall be increased such number of the additional councillors as is equal to one-third part of the whole increase, or if such whole increase shall not be exactly divisible by three such number as is next greater than one-third of the whole increase, shall be appointed by her Majesty, and the remaining additional members of council shall be elected by the inhabitants of the colony.

XII. And be it enacted, that all the provisions herein contained concerning the qualification and disqualification of electors in New South Wales, and subject to the provisions herein contained, all the provisions of the said firstly-recited act of the sixth year of the reign of her Majesty, as explained and amended by the said secondly-recited act of the eighth year of her Majesty, concerning the election of the elective members of the Legislative Council of New South Wales; the qualification and disqualification of elective members; the appointment of the non-elective members of such council, and the tenure of their seats, and their holding of offices; the resignation of members of such council, and the causes by which their seats may be vacated; the authority of the governor upon and in respect of vacancies; the hearing and determination of questions respecting vacancies; the places and times of holding such council; the duration, prorogation, and dissolution thereof; the election, allowance, and disallowance of the speaker; the number or portion of members competent to the despatch of business; the decision of questions; the oath or affirmation to be taken or made and subscribed, and the declaration of qualification to be made, by members; the preparation, adoption, approval, and confirmation or disallowance of standing rules and orders; the issue of writs for elections upon vacancies and upon a dissolution or other determination of such council; the proposal of drafts of laws and amendments to such council; the giving and withholding of her Majesty's assent to bills, and the reservation of bills for the signification of her Majesty's pleasure thereon, and the bills so reserved; the instructions to be conveyed to the governor for his guidance in relation to the matters aforesaid; and the disallowance of

bills by her Majesty, shall apply to and be in force in the colony of Victoria, and in each of the said colonies of Van Diemen's Land, South Australia, and Western Australia, in which a Legislative Council shall be established under this act, as if all such provisions were here repeated, the name of such respective colony being substituted for the name of the colony of New South Wales.

XIII. Provided always, and be it enacted, that so much of the said firstly-recited act of the sixth year of the reign of her Majesty as requires that all bills altering the salaries of the judges, or any of them, shall in every case be reserved for the signification of her Majesty's pleasure thereon, shall not apply to or be in force in the colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia, or any of them, and after the establishment of the said colony of Victoria shall be repealed.

XIV. And be it enacted, that the governors of the said colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia respectively, with the advice and consent of the Legislative Councils to be established in the said colonies under this act, shall have authority to make laws for the peace, welfare, and good government of the said colonies respectively, and, with the deductions and subject to the provisions herein contained, by such laws, to appropriate to the public service within the said colonies respectively the whole of her Majesty's revenue within such colonies arising from taxes, duties, rates, and imposts levied on her Majesty's subjects within such colonies: provided always, that no such law shall be repugnant to the law of England, or interfere in any manner with the sale or other appropriation of the lands belonging to the Crown within any of the said colonies, or with the revenue thence arising; and that it shall not be lawful for any such council to pass, or for any such governor to assent to, any bill appropriating to the public service any sums or sum of money, unless the governor on her Majesty's behalf shall first have recommended to the council to make provision for the specific public service towards which such money is to be appropriated; and that no part of her Majesty's revenue in any of the said colonies arising from the sources aforesaid shall be issued, or shall be made by any such law issuable, except in pursuance of warrants under the hand of the governor of the colony, directed to the public treasurer thereof.

XV. And be it enacted, that the revenues of the said colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia respectively shall be permanently charged with all the costs, charges, and expenses incident to the collection, management, and receipt thereof, such costs, charges, and expenses of duties of import and export to be regulated and audited in such manner as shall be directed by the commissioners of her Majesty's treasury of the United Kingdom of Great Britain and Ireland, and all such costs, charges, and expenses of other branches of the said revenue which are subject to be appropriated by the governors and councils of such colonies being subject to be regulated and audited in such manner as shall be directed by laws of such governors and councils.

XVI. And be it enacted, that after the establishment of the said colony of Victoria so much of the said firstly-recited act of the sixth year of the reign of her Majesty as makes payable to her Majesty, her heirs and successors, out of the revenue fund of the

said colony of New South Wales, the sums therein mentioned for defraying the expenses of the services and purposes named in the schedules to the said act, and the provisions concerning the appropriation of such sums, shall be repealed.

XVII. And be it enacted, that there shall be payable to her Majesty, every year, out of the revenue funds arising from taxes, duties, rates, and imposts levied within the said colony of New South Wales after the establishment of the colony of Victoria, the several sums mentioned in the schedule (A.) to this act; and out of the like revenue fund levied within the said colony of Victoria after the establishment thereof, the several sums mentioned in the schedule (B.) to this act; and out of the like revenue fund levied within the colony of Van Diemen's Land after the establishment of a Legislative Council therein under this act, the several sums mentioned in the schedule (C.) to this act; and out of the like revenue fund levied within the colony of South Australia after the establishment of a Legislative Council therein under this act, the several sums mentioned in the schedule (D.) to this act; such several payments to be made for defraying the expenses of the services and purposes mentioned in the said schedules respectively, and the said several sums to be issued by the treasurers of the said colonies respectively in discharge of such warrants as shall be from time to time directed to them under the hands and seals of the governors of such colonies; and the said treasurers shall account to her Majesty for the same through the commissioners of her Majesty's treasury of the United Kingdom of Great Britain and Ireland, in such manner and form as her Majesty shall be graciously pleased to direct.

XVIII. And be it enacted, that it shall be lawful for the governors and Legislative Councils of the said colonies of New South Wales, Victoria, Van Diemen's Land, and South Australia respectively, by any act or acts, to alter all or any of the sums mentioned in the said schedules respectively, and the appropriation of such sums to the services and purposes therein mentioned, but every bill which shall be passed by the council in any of the said colonies altering the salary of the governor, or altering the sums mentioned in the third part of any of the said schedules (A.) (B.) and (C.), shall be reserved for the signification of her Majesty's pleasure thereon, and until and subject to such alteration by act or acts as aforesaid the salaries of the governors and judges shall be those respectively set against their several offices in the first parts of the said several schedules; and accounts in detail of the expenditure of the several sums for the time being appropriated under this act, or such act or acts as aforesaid of the governor and Legislative Council, to the several services and purposes mentioned in the said schedules, shall be laid before the Legislative Councils of such colonies respectively within thirty days next after the beginning of the session after such expenditure shall have been made: provided always, that it shall not be lawful for the governor and Legislative Council of any of the said colonies, by any such act as aforesaid, to make any diminution in the salary of any judge to take effect during the continuance in office of any person being such judge at the time of the passing of such act; and provided also, that it shall be lawful for the governors of the said colonies respectively (either before or after such sums have been altered by act or acts of the governor and Legislative Council as aforesaid) to alter from

time to time the sums appropriated to any of the services and purposes mentioned in the first parts of the said schedules, except the salaries of the governors and judges, and also the sums appropriated to any of the services and purposes mentioned in the second parts of the said schedules, but such governors respectively shall not by such alteration increase the total amount for the time being appropriated under this act, or such act or acts of the governor and Legislative Council, to the services and purposes mentioned in either of such parts of the said schedules, nor contravene any provision made by act or acts of the governor and Legislative Council for the permanent appropriation of any sum to any of such services and purposes.

XIX. And be it enacted, that within thirty days after the beginning of the first session in each year of the Legislative Councils of the said colonies of New South Wales, Victoria, Van Diemen's Land, and South Australia, the governors of such colonies respectively shall make known by message to such Legislative Councils the amount of the sums intended to be appropriated out of the sums applicable thereto to the several services and purposes named in the second parts of the said several schedules for the service of the year then next ensuing.

XX. And whereas, by the said firstly-recited act of the sixth year of her Majesty, it was enacted, that it should be lawful for the governor, by letters patent under the great seal of the colony of New South Wales, to incorporate the inhabitants of every county within the said colony, or of such parts of counties or other divisions as to him should seem fit, to form districts for the purposes of that act, and by such letters patent to establish a council in every such district for the local government thereof, subject to certain provisions in the same act contained: Be it enacted, that where under any letters patent issued under the provision lastly herein-before recited there has not been before the proclamation of this act in the said colony of New South Wales any election of councillors for the district formed by such letters patent, such letters patent shall from and after such proclamation be void; and where before such proclamation there has been an election of councillors for the district formed by any such letters patent, it shall be lawful for the governor of the said colony of New South Wales, and after the establishment of the colony of Victoria in the case of a district within the territories comprised in such colony, for the governor of such colony, upon the petition of the council in such district, or if there be no such council existing, then, upon the petition of the inhabitant householders of such district, by letters patent under the great seal of the said colony of New South Wales or of the said colony of Victoria (as the case may require), wholly to revoke the letters patent forming such district; and it shall be lawful for the governor of the said colony of New South Wales or of the said colony of Victoria (as the case may require), upon the petition of the inhabitant householders of any district heretofore formed by any such letters patent as aforesaid which shall become void or be revoked under this act, or of any county, part of a county, or other division comprised in any such district, or in more than one such district, or of any other county, part of a county, or other division not comprised in any district formed by any such letters patent as aforesaid which shall continue in force, or by any letters patent to be issued as herein-after mentioned, by letters patent under the great seal of the

said colony of New South Wales or of the said colony of Victoria (as the case may require) to incorporate the inhabitants of such district or of such county, part of a county, or other division to form a district for the purposes of the said firstly-recited act of the sixth year of her Majesty, and of this act, and by such letters patent to establish a council in every such district for the local government thereof; provided always, that notice of every such petition for the grant of such letters patent for forming a district and establishing a council therein, and of the time when the governor intends to take the same into consideration, shall be published by proclamation one month at least before the consideration of such petition; and the provisions of the said firstly-recited act of the sixth year of her Majesty, concerning the provisions to be contained in letters patent issued under that act for forming districts and establishing a council in every such district, shall extend and be applicable to all letters patent issued under this act for forming districts and establishing district councils as if such provisions of the said act were here repeated, the name of the colony of Victoria, where the case may require, being substituted for the name of the colony of New South Wales; and, save as herein provided, it shall not be lawful for the governor of the said colony of New South Wales to form districts and establish councils in such districts as by the lastly herein-before recited enactment authorised or required.

XXI. And be it enacted, that the provision of the said firstly-recited act of the sixth year of her Majesty as amended by this act, authorising the governor of the said colony of New South Wales, upon such petition as herein mentioned, to form districts, and establish a council in every such district, shall apply to and be in force in each of the said colonies of Van Diemen's Land, South Australia, and Western Australia, in which a Legislative Council shall be established under this act, as if such provision were here repeated, the name of such respective colony being substituted for the name of the colony of New South Wales.

XXII. And be it enacted, that all the provisions of the said firstly-recited act of the sixth year of her Majesty, concerning the authority of district councils to make bye-laws, the transmission of a copy of every such bye-law to the governor of the colony, the disallowance and the time of coming into effect of such bye-law, the authority of the governor to specify the metes and bounds of districts, the number of councillors for every district, and the time and manner of their election, to fix the qualification of the councillors, to nominate the councillors who shall form the first councils in every district, to appoint the order and manner of their going out of office, to fix penalties for qualified persons refusing to take office in the council, and to make all other necessary provisions for establishing district councils, for defining their powers, and enabling them to exercise their functions, and the authority of the governor in every case of vacancy of the office of district councillor, if a new election be not made within the time in the same act mentioned, to nominate a person to fill the vacancy, shall extend and be applicable to all letters patent issued under this act for forming districts and establishing district councils, and to such districts and district councils, as if all such provisions were here repeated, the name of the colony in which such district is formed being (where the case may require) substituted for the name of the colony of New South Wales.

XXIII. And whereas by the said firstly-recited act of the sixth year of the reign of her Majesty it was enacted, that one-half of the expense of the police establishment of the said colony of New South Wales (exclusive of the convict establishment) should be defrayed out of the general revenue arising from taxes, duties, rates, and imposts within the said colony, and the other half should be defrayed by assessment upon the several districts of the colony, in such proportions as should be from time to time fixed by the governor and Legislative Council: Be it enacted, that so much of the provision lastly herein-before recited as requires that half of the expense of such police establishment as aforesaid shall be defrayed by assessment upon the several districts of the colony shall be repealed.

XXIV. And be it enacted, that, notwithstanding any letters patent issued under the said firstly-recited act of the sixth year of the reign of her Majesty, or to be issued under this act, or anything in either of such acts contained, it shall be lawful for the governors and councils of the said colonies of New South Wales, Victoria, Van Diemen's Land, South Australia, and Western Australia respectively by any act or acts to make such regulations and provisions for or concerning the raising, assessing, and levying of tolls, rates, and assessments within or on or in respect of any public works or any property within districts formed in such colonies respectively under the said act or this act, and the appropriation of such tolls, rates, and assessments, and to make such alterations and provisions in and concerning the constitution, duties, and powers of district councils, and such alterations in the number and boundaries of districts, and such provisions for establishing district councils in new or altered districts, as to such respective governors and councils may seem meet.

XXV. And be it enacted, that all laws and ordinances made under the provisions hereby repealed or otherwise, and which shall be in force in the territories comprised in the said colony of Victoria, and in the said colonies of Van Diemen's Land, South Australia, and Western Australia respectively, at the time of the issue of the writs for the first election of Legislative Councils in the said colonies respectively under this act, so far as the same are consistent with the provisions of this act, shall continue in force in the said colonies respectively, subject, as to such laws or ordinances as would then have remained subject to be disallowed by her Majesty, to the authority of her Majesty to disallow the same within the time within which such disallowance might have been signified in case this act had not been passed, and subject to the power of the governors and Legislative Councils of the said respective colonies, in the manner and subject to the rules and restrictions herein prescribed, to repeal or vary such laws or ordinances; and where under any law which shall be in force at the time aforesaid in the territories to be comprised in the colony of Victoria any powers are vested in or may be delegated to the governor of New South Wales, the same, so far as respects all territories to be comprised within the colony of Victoria, and so far as the same are consistent with the provisions of this act, shall thenceforth be vested in and may be delegated to the governor of the said colony of Victoria.

XXVI. And be it enacted, that so much of the said act of the ninth year of the reign of King George the Fourth as requires that the purposes for which every such tax or duty as therein mentioned

may be imposed, and to or towards which the amount thereof is to be appropriated and applied, shall be distinctly and plainly stated in the body of every law or ordinance imposing every such tax or duty, shall be repealed; and no such law or ordinance made or to be made by the governor and council of Van Diemen's Land, and enrolled and recorded in the supreme court of the said colony, shall be or deemed to have been invalid by reason of such purposes not being so stated in the body of such law or ordinance.

XXVII. And be it enacted, that, subject to the provisions of this act, and notwithstanding any act or acts of Parliament now in force to the contrary, it shall be lawful for the governor and Legislative Council of the colony of New South Wales, and after the establishment of Legislative Councils therein respectively under this act for the respective governors and Legislative Councils of the colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia, to impose and levy such duties of customs as to such respective governors and councils may seem fit on the importation into such respective colonies of any goods, wares, and merchandise whatsoever, whether the produce or manufacture of or imported from the United Kingdom, or any of the colonies or dependencies of the United Kingdom, or any foreign country: provided always, that no new duty shall be so imposed upon the importation into any of the said colonies of any article the produce or manufacture of or imported from any particular country or place which shall not be equally imposed on the importation into the same colony of the like article the produce or manufacture of or imported from all other countries and places whatsoever.

XXVIII. And whereas under an act of the governor and council of New South Wales passed in the fourth year of the reign of her Majesty, intituled "An Act to provide for the more effectual Administration of Justice in New South Wales and its Dependencies," the number of the judges of the supreme court of New South Wales constituted under the said act of the ninth year of King George the Fourth has been increased to five, and one of such judges is resident, and has such power, jurisdiction, and authority within the district of Port Phillip, subject to such appeal to the said supreme court, as by the said act of the governor and council of New South Wales is provided: be it enacted, that it shall be lawful for her Majesty, by letters patent under the great seal of the United Kingdom of Great Britain and Ireland, to erect and appoint a court of judicature in the said colony of Victoria, which shall be styled "the Supreme Court of the Colony of Victoria;" and such court shall be holden by one or more judge or judges, and shall have such ministerial and other officers as shall be necessary for the administration of justice in the said court, and for the execution of the judgments, decrees, orders, and process thereof; and all the provisions of the said act of the ninth year of the reign of King George the Fourth, concerning the appointment and removal of judges and officers of the supreme court of New South Wales, and for appointing persons to act in the place and stead of judges being absent, resigning, dying, or becoming incapable to act, and concerning appeals to her Majesty in council from judgments, decrees, orders, or sentences of such court, shall apply to the said supreme court to be erected in the said colony of Victoria, but so that the powers of the governor of New South Wales in relation to the matters aforesaid shall be vested in

the governor of the colony of Victoria; and from such time as shall be mentioned in such letters patent all the authorities, powers, and jurisdiction of the supreme court of New South Wales, and of any judge thereof, over or to be exercised within or in relation to the said colony of Victoria, including all admiralty jurisdiction exercisable within the limits thereof, shall cease to be had and exercised by such last-mentioned supreme court and judge respectively, and shall thenceforth be vested in and exercisable by the supreme court erected by such letters patent; provided that in the meantime the said authorities, powers, and jurisdiction of the said supreme court of New South Wales and of the judges thereof, within and in respect of the said colony of Victoria shall remain as if this act had not been passed, unless or until the same shall be varied by act of the governor and council of the said colony of Victoria.

XXIX. And be it enacted, that it shall be lawful for the governors and councils of the said colonies of New South Wales, Van Diemen's Land, and Victoria respectively, from time to time, by any act or acts, to make such provision as to them may seem meet for the better administration of justice, and for defining the constitution of the courts of law and equity and of juries, within the said colonies respectively, or within any present or future dependencies thereof respectively, anything in the said act of the ninth year of King George the Fourth, or in this act, or in any charter of justice or order in council made or issued in pursuance thereof respectively, or in any law, statute, or usage, to the contrary thereof notwithstanding.

XXX. And be it enacted, that in case at any time hereafter the Legislative Councils of the said colonies of New South Wales and Victoria, or the Legislative Council of one of the said colonies, shall petition her Majesty to alter the boundaries of the said colonies of New South Wales and Victoria, so as to transfer to one of such colonies a portion of the territories which, after the separation authorised by this act, shall be comprised in the other of them, it shall be lawful for her Majesty, if she shall think fit, by any order to be made with the advice of her privy-council, to alter such boundaries in pursuance of the prayer of such petitions or petition, or in such varied manner as her Majesty with such advice shall think fit: provided always, that unless the councils of both the said colonies shall petition for an alteration of such boundaries, notice of the petition, and of the intention of her Majesty to order the same to be taken into consideration by her privy-council, shall be given in such manner as her Majesty shall direct to the Legislative Council which shall not have petitioned, six months at least before such petition shall be so considered.

XXXI. Provided also, and be it enacted, that it shall not be lawful for the legislatures of any of the said colonies to levy any duty upon articles imported for the supply of her Majesty's land or sea forces, nor to levy any duty, impose any prohibition or restriction, or grant any exemption, bounty, drawback, or other privilege, upon the importation or exportation of any articles, nor to impose any dues or charges upon shipping, contrary to or at variance with any treaty or treaties concluded by her Majesty with any foreign power.

XXXII. And be it enacted, that, notwithstanding anything hereinbefore contained, it shall be lawful for the governor and Legislative Council of the colony of New South Wales, after the separation

therefrom of the colony of Victoria, and for the governors and Legislative Councils of the said colonies of Victoria, Van Diemen's Land, South Australia, and Western Australia respectively, after the establishment of Legislative Councils therein under this act, from time to time, by any act or acts to alter the provisions or laws for the time being in force under this act, or otherwise, concerning the election of the elective members of such Legislative Councils respectively, the qualification of electors and elective members, or to establish in the said colonies respectively, instead of the Legislative Council, a council and a house of representatives, or other separate legislative houses, to consist respectively of such members to be appointed or elected respectively by such persons and in such manner as by such act or acts shall be determined, and to vest in such council and house of representatives or other separate legislative houses the powers and functions of the Legislative Council for which the same may be substituted: provided always, that every bill which shall be passed by the council in any of the said colonies for any of such purposes shall be reserved for the signification of her Majesty's pleasure thereon; and a copy of such bill shall be laid before both houses of Parliament for the space of thirty days at the least before her Majesty's pleasure thereon shall be signified.

XXXIII. Provided always, and be it enacted, that the provisions of the said firstly-recited act of the sixth year of the reign of her Majesty, as explained and amended by the said secondly-recited act of the eighth year of the reign of her Majesty, concerning bills reserved for the signification of her Majesty's pleasure thereon, shall be applicable to every bill so reserved under the provisions of this act.

XXXIV. And whereas by the said firstly-recited act of the sixth year of the reign of her Majesty power is reserved to her Majesty by letters patent to be from time to time issued under the great seal of Great Britain and Ireland to define the limits of the said colony of New South Wales, and to erect into a separate colony or colonies any territories which then were or were reputed to be or thereafter might be comprised within the said colony of New South Wales, provided that no part of the territories lying southward of the twenty-sixth degree of south latitude in the said colony of New South Wales should by any such letters patent as aforesaid be detached from the said colony: and whereas it is expedient that the power reserved to her Majesty as aforesaid should be extended over certain parts of the said territories lying southward of the twenty-sixth degree of south latitude, upon the application of the inhabitants thereof: be it enacted, that it shall be lawful for her Majesty from time to time, upon the petition of the inhabitant householders of any such of the territories in the said recited proviso mentioned as lie northward of the thirtieth degree of south latitude, to detach such territories from the colony of New South Wales, and to erect such territories into a separate colony or colonies, or to include the same in any colony or colonies to be established under the powers of the last-mentioned act; and all the powers and provisions of the last-mentioned act in respect to any new colony or colonies to be established under such act shall extend to any new colony or colonies to be established under this enactment. [Clause XXXV. provides that Legislative Councils may be established in newly-erected colonies; XXXVI. relates to the interpreta-

tion of governor; and XXXVII. to the commencing operations of the act within six weeks after its being received and proclaimed in each colony.]

NEW SOUTH WALES.—*Schedule (A.) Part 1.*—Governor, £5,000; chief justice, £2,000; two puisne judges, £3,000; salaries of the attorney and solicitor-general, crown solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony, £19,000: total, £29,000. *Schedule (A.) Part 2.*—Colonial secretary and his department, £6,500; colonial treasurer and his department, £4,000; auditor-general and his department, £3,000; salary of clerk, and miscellaneous expenses of Executive Council, £500; pensions, £2,500: total, £16,500. *Schedule (A.) Part 3.*—public worship, £28,000.

VICTORIA.—*Schedule (B.) Part 1.*—Governor, £2,000; judge, £1,500; salaries of attorney-general and crown solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony, £5,000: total, £8,500. *Schedule (B.) Part 2.*—Colonial secretary and his department, £2,000; colonial treasurer and his department, £1,500; auditor-general and his department, £1,100; salary of clerk of Executive Council, and miscellaneous expenses, £400; pensions, £500:

total, £5,500. *Schedule (B.) Part 3.*—Public worship, £6,000.

VAN DIEMEN'S LAND.—*Schedule (C.) Part 1.*—Governor, £2,000; chief justice, £1,500; puisne judge, £1,200; salaries of attorney and solicitor-general, crown solicitors, and contingent and miscellaneous expenses of administration of justice throughout the colony, £13,300: total, £18,000. *Schedule (C.) Part 2.*—Colonial secretary and his department, £2,800; colonial treasurer and his department, £1,800; auditor-general and his department, £1,600; salary of clerk of Executive Council and miscellaneous expenses, £700; pensions, £2,000; total, £8,900. *Schedule (C.) Part 3.*—Public worship, £15,000.

SOUTH AUSTRALIA.—*Schedule (D.) Part 1.*—Governor, £2,000; judge, £1,000; salaries of the advocate-general and crown solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony, £5,000: total, £8,000. *Schedule (D.) Part 2.*—Colonial secretary and his department, £2,000; colonial treasurer and his department, £1,500; auditor-general and his department, £1,000; salary of clerk of Executive Council and miscellaneous expenses, £500: total, £5,000.

TABULAR VIEW OF THE WESLEYAN MISSIONS—1853.

Tabular View of the Wesleyan Missions in Australia—Close of 1853.

Central or Principal Stations or Circuits.	Chapels.	Other Preaching Places.	Missionaries, and assistant Missionaries.	Subordinate Agents.		Unpaid Agents.		Fall and accreted Church Members.	On trial for Membership.	Sabbath Schools.	Sabbath School Scholars.	Day Schools.	Day School Scholars.	Total number of Scholars, deducting for those who attend both Sabbath and Week-day Schools.			Attendants on Public Worship, including Members and Scholars.
				Catechists, &c.	Day-school Teachers.	Sabbath School Teachers.	Local Preachers.							Male.	Female.	Total.	
NEW SOUTH WALES:																	
1. Sydney, North	4	1	3	—	2	60	8	344	15	4	496	1	120	205	211	416	2,000
2. Sydney, South	9	2	3	—	6	95	9	361	4	9	1,000	4	545	254	201	455	1,800
3. Sydney, East	2	2	3	—	2	26	7	138	4	3	367	1	90	200	210	410	1,000
4. Parramatta	6	3	2	—	—	33	8	156	6	4	282	—	—	136	146	282	1,050
5. Windsor	6	4	2	—	2	32	14	192	3	7	328	2	79	170	158	328	1,000
6. Bathurst, Sofala, and the Turon gold-mines	8	9	2	—	—	20	13	182	4	2	198	—	—	95	103	198	1,050
7. Hunter River	15	6	2	—	4	47	26	363	13	7	405	2	122	180	190	370	1,300
8. Mudgee and Bowenfels	3	8	2	—	—	5	—	57	6	1	65	—	—	35	30	65	750
9. Camden	6	5	2	—	—	15	4	106	1	2	103	—	—	42	61	103	500
10. Wollongong	4	11	2	—	—	13	3	124	3	3	94	—	—	53	41	94	400
11. Goulburn and Araluen gold-mines	2	28	2	—	—	15	7	109	4	3	119	—	—	52	67	119	900
12. Moreton Bay	3	3	1	—	—	10	5	68	—	2	90	—	—	45	45	90	300
13. Port Macquarie	1	—	1	—	—	—	1	100	—	—	—	—	—	—	—	—	100
VICTORIA:																	
14. Melbourne	7	5	7	—	7	60	31	296	6	7	361	3	321	200	221	421	3,500
15. Collingwood	2	5	1	—	4	28	17	206	4	2	282	2	200	199	186	385	1,500
16. Brighton	3	—	1	—	—	18	1	69	—	3	150	1	86	65	85	150	500
17. Geelong	4	4	1	—	6	62	19	300	20	4	613	3	355	314	316	630	1,650
18. Port Fairy	3	4	1	—	1	16	3	65	1	3	90	1	40	50	60	110	450
19. Gold-fields (Mt. Alexander)	2	10	2	—	2	30	31	180	50	5	160	2	70	—	—	—	4,000
20. Bakarat	—	3	1	—	1	11	7	80	—	1	70	1	—	—	—	—	500
SOUTH AUSTRALIA:																	
21. Adelaide, South	8	3	1	—	3	50	21	356	15	9	510	2	120	290	240	530	2,000
22. Adelaide, North	8	4	2	—	1	41	21	300	5	8	390	—	—	180	210	390	1,400
23. Willunga	4	6	1	—	—	34	11	195	10	4	160	—	—	90	70	160	600
24. Burra-Burra	2	2	1	—	—	17	4	60	11	1	150	—	—	80	70	150	550
25. Mapunda	1	1	1	—	—	9	2	30	5	1	104	—	—	50	54	104	550
26. Mount Barker	4	3	1	—	—	20	4	125	10	3	200	—	—	120	80	200	600
27. Swan River, (Perth, &c.)	2	4	3	—	—	20	4	60	3	2	150	—	—	79	71	150	440
28. Native Institutions (York, &c.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	119	136	50	3	41	787	281	4,632	213	100	6,837	25	2,148	3,184	3,126	6,310	30,190

* No Returns.

INDEX TO THE FOUR COLONIES OF AUSTRALIA.

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