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## Published Every Month, Except July, at St. John, N. B.

G. U. HAY, - - Managing Editor.

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[An error on page 228 (February number) makea it " 282 ," and the error is unfortunately contioued through the following numbera.]

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The attention of our subseribers is directed :o the business motice on another pare.

As index to volume eightecon acompanies this number of the Revens. Wie loone our subseribers bind the Revien and keep it for future reference.

Therl: will be man Revew for duly, but the next number with be issued alont the first of August, instead of the tenth. Wuring the comintr yar the date of publication w:11 be on the first of each momth. Intending comtributors and adsertisers should make a note of this.

Dr. J. R. Ivch, Superintendent of Education for New Brunswick, will be one of the speakers at the American Institute of Instruction which meets at I'ortland, Maine, July 10 to 3 .

Considerable space is given up in this number to the work done by the colleges during the past year. Such a record of progress in the higher elucation is gratifying.

The death of Mr. John Me.Millan, head of the firm of Messrs. J. \& A. McMillan, of St. Jolm, has caused a widespread feeling of regret. Of a noble presence, there was added rare kindliness and courtesy of manner. He had endeared himself to a large circle, not only by his genial and man!y nature. but by the strict integrity in all business relations which characterized an old and bonorable firm.

Few teachers are permitted to celebrate the jubitee of their entrance upon work. Rev. Dr. Sawser has seen graduates go out from Acada College for the past fifty years. He has helped largely to shape the destinies of many lives, to mould character, and present, by his own example and teachings, high ideals of manliness and Christ:an life. The results of his ruset influence and lorodel culture are felt to-day by humdreds of men and women who regard him with respect and affection.

The REABW extends its congratulations to Dr. John brittain, director of the Macdonald rural sclools in New Brumswick, and to Mrs. J. S. Armstrong, A. M., of the "Netherwood" scheol. These were the recipients of bomorary degrees at the recent Encenia of the ('niversity of New lintuswick. The honors were well deserved and will be warms approved of in educational circles.
Xot less hearty are the congratulations wo 1 i. il. Eatom, superintement of sehools for Victoria. li. C... Who received the dearee of 1). C. L. at the elosingry exercises of Acadia ( iniversity last werk. Dr. Eatom is fittingly remembered for his former excellent work in the Nowa Scot:a Xormal School, anct the is regarded as one of the strongest and most eapable men in educattomat circles in the West.
$W_{\text {ith }}$ this number the Review enters upon its nineteenth volume. The aim will be to make it this year still more useful to its readers, who are now found in increasing numbers in every province of the Dominion.

The Stummer School of Science will mect this year at Yarmouth, from Tuesday, July inth, to Friday, July 28th. The location is an admirable one, easy of access, and combining many attractive features of scenery and climate which will make it a pleasant recreation spot for those who attend. Our advertising columns will give some information to those who are interested. The calcudar, which gives the courses of study and other information, may be had by writing to the secretary, Mr. 'W. R. Campbell, Truro. Instruction and recreation are so well combined in the Summer School that teachers especially will find it of great advantage to take the course during their vacation.

Dr. A. H. MacKay, Superintendent of Education, Halifax, was one of the speakers at the teachers' convention in Ottawa on the $25^{\text {th }}$ of May. Two days were given up to papers and discussions on nature-study, which just now is attracting great attention throughout Ontario. Dr. MacKay's address on the nature-study movement in Nova Scotia was an excellent one, and aroused the enthusiamm of his auditors. Other noted speakers were Professor J. W. Robertson, Dr. Jas. Fletcher, Dr. Sinclair and Professor Hodre, of Worcester, Mass.

Devoting the whole time of a teachers' convention for two days to such an important subject as nature-study scems worthy of imitation elscwhere.

## The Treatment of the Insane.

How those infortunate people, deprived of their reason, appeal to our sympathies! Years ago the writer visited an insame asyluni and the remembrance of it haunts him still. Men and women, sitting with folded hands day after day without occupation; others more violent confined in straight jackets and filling the air with curses and lamentations. How different the treatment now-and the results.

A few days ago a brief visit was paid to the Lunatic Asylum at Verdun, near Montreal, at the head of which is Dr. T. J. W. Burgess, an old friend. Imagine a fine spacious butilding, every room of which is neat and faultlessly clean, pictures on the walls and books for the occupants, wich some useful handiwork to employ their time. Outside was a farm and beautiful grounds, with fine trees and shaded walks, overlooking the noble

St. Lawrence. On entering the grounds a bascball match was going on, while two score or more on the grand stand applauded hits or home-runs. It was a well-played game; all, players and spectators, were lunatics! As one stood on a broad verandah overlooking the ample recreation grounds, three young women walked by, just from the golf links, talking with enthusiasm but with perfect saneness apparently of their recent game.
"What is that building yonder?"
" That?" said Dr. Burgess, " that is our curling rink."
"What! do lunatics play the game of curling?"
"Do they?" was the replv; "we had a dozen curlers last winter that might try conclusions with any 'knights of the broom.' Three of them were discharged cured this spring, and I attribute their cure chiefly to the interest they took in curling."

There was ample provision for other sports and games, both in winter and summer; and a farm of nearly one hundred and thirty acres, which yielded produce enough-perhaps more than enouglfor the inmates of the Asylum, nearly six hundred persons, including patients and the staff of attendants. There were also a fine conservatory, a hennery, horses, cows and other animals. Walking round the grounds with an air of consequence was the "boss," a lunatic who imagined that he owned and directed the whole. And no one undeceived him.

Tact, sympathy, courtesy marked the demeanor of nurses and attendants toward the patients: abundance of healthy exercise and the stimulus of athletic games diverted their thoughts from themselves. What ideal conditions for a class of unfortunates about whom the careless world scarcely knows or thinks!

The east bound transcontinental train on $t$ he Canadian Pacific Railway was slowly toiling up through the Fraser River canyon when the brakeman called out, as he approached a small town, "Yale! Yale!" Two passengers were sitting in the Pu1lman, and one said to the other in the confident tone of him who has mastered his geograpliy, "Yale! Ah, yes, that's the seat of a great university, you know!"

> Ask God to give thee skill
> In comfort's art,
> That thou mayest conscerated be And set apart
> Unto a life of sympathy,
> For heavy is the weight of in
> In every lieart,
> And conforters are nceded much
> Of Christ-like touch.

## Among Teachers in the West.

By G. U. Hay.

It will be of interest to the readers of the Review to give some account of educational people and conditions in British Columbia, as they were observed at Revelstoke during the Easter vacation teachers' institute, and in a somewhat hurried visit to the principal towns and cities of the province at a later period. Revelstoke is a prettily situated town of nearly 3,000 inhabitants on the Columbia river, which expands just below the town into the Arrow Lakes leading to the beautiful Kootenay country farther south. It is on a plateau shut in by snowcapped mountains, which, like nearly all the Selkirk range, are wooded well up to the summit.
I had travelled from the Atlantic scaboard nearly 3,000 miles with few signs of the awakening of spring, but in and around Revelstoke (April 25th) the birds were in full song, with the foliage and grass of a many tinted green, so grateful to the eye after a long winter, and the early flowers-violets, blue and yellow-spring-beauty and others known in our eastern flora, w:th some peculiar to the west -bursting into bloonl. I had heard that the forests of British Columbia were silent, that the songe of birds was scarcely ever heard, but I did not find it so. Along the bare defiles of the Rockies it was perhaps true, but everywhere else many songsters enlivened the woods, including the meadow lark. whose clear, joyous notes were heard on prairie and mountain.

The provincial institute is held alternately on the coast, or in the interior. This year there were very few from the coast, except the inspectors and the normal sehool faculty. and one had a good opportunity of seeing the teachers of the comutry and of the eities and towns in the interior. They were a bright and eapable looking lot of men and women, having a keen interest in everything pertaining to their work, entlus:astic, and apparently eager to advance themselves and their schools. The papers and addresses were seholarly and marked by a practical view of all fuestoms discussed. The debates were conducted in a courtenns and moderate tone. some of the speakers showing considerable fluency and readiness.

A large number of the teacliers of British Columbia, especially those occupying learling pos:tions, are from Eastern Canada. One meets frequently the graduates of MeGill. Toronto, Dallonusic, Acadiat, University of New Prunswick and Monnt Allison.

The farther west one goes, the more does lie meat Maritime Province men and women, not only as teachers, but in every profession and occupation, as if the overmastering desire was to reach the sea and hear again the roar of breakers. Few who have gone to the middle west or far west have the desire to return to the east for a permanent abode. When they reach the limit of the West, where the East begins, they are content to settle down in those fair cities of Vancouver, Victoria, New Westminster, amid the Kootenay lakes, in the Okanagan Valley. or to choose a home in one of the thousand picturesque valleys of British Columbia, where almost perpetual summer reigns, and where no extremes of heat and cold are felt. The temperature very seldom rises above $80^{\circ}$ on the sea coast of British Columbia, nor falls much below the freczing point in winter-if such a season can be said to exist there.

Mr. David Wilson, the president of the provincial institute this year, is senior inspector of schools for the province. He is a mative of Richibucto, N. B., and a graduate of the University of New Brunswick. He has been in British Columbia for twenty years. and is regarded as a very successful administrator. IIe is familiar with every portion of the province, and has accumulated a fund of information and anecdote.

In his anmual address to the institute, President Wilson, in answering some statements made by a clergyman who had denounced the sehools as "pagan," made an able defence of the excellent moral influence of the sehools of British Coltumbia, and paid a warm tribute to the ligh character of the teachers, and their efforts to train their pupils to beenme honest and truthful men and women.

The other inspectors of schools in British Columhia are Mr. C. A. Stewart, of Vancouver, and Mr. J. S. Cordon, of Vernon. Both are natives of I'rince Edward Island, and both have grateful recollections of the " Ciem of the Culf," of the veteran and honored teacher, Dr. Anderson, and the n!d Prince of Wales College, whose well-equipped sclolars are found occupying lomorable positions :n every part of the continent, especially the Fiar West of Canada. Mr. Stewart and Mr. Gorion have won their way steadily to the front, and have been prominent in the elucational development of British Columbia.

Among those who took a leading part in the discussions at the institute was Principal Willian Rums, of the provincial mormal school. He is
the Nestor of British Columbia teachers, but that does not imply in a young province like this that he is advanced in years. Indeed he is the embodiment of activity and intellectual vigor, of ripe experience, and thoroughly alive to the educational needs of the province, whose schools, even to the most : emote districts, he appears to know intimatcly. His practical common-sense views, interspersed with characteristic touches of humor, won for him the close attention of his auditors. It was pleasant to see the bond of sympathy which prevailed between the veteran principal and many of the teachers whose training has been his life work.

Other members of the normal school staff whose addresses formed an interesting feature of the inst:tute were Mr. Blair and Mr. J. D. Buchanan. The latter is a keen and ready debater, and his thoughtful address on elementary arithmetic and the discussion which ensued were followed very closely by the institute.

To an obscrver, the display of school work in penmanship, composition, nature-study, drawing. plant specimens, was a most creditable one, and was a practical illustration of the excellence of the work done in the schools. The results in color work and drawing were especially noticcable, and reflected the genius of Mr. Blair, the teacher of drawing in the provincial normal school.

The public address of Hon. F. J. Fulton. Minister of Education, was a very happy one. It dealt with a subject that most educational speakers in other provinces approach with reluctance, real or feigned, and deal with in tones of gloomy pessimism- the salaries of teachers. But the M:nister of Education for British Columbia was optimistic, even jubilant, as he spoke of the generosity of the government and people in the good salaries paid to teachers, the minimum being abont $\$$ rooo. His happy looking, well dressed, well paid auditors beamed with satisfaction as he cunoted fat Columb: an figures and arrayed them aga inst the lean, starvation salaries doled out to teachers in some other places.

I shall have occasion to refer in future articles to some matters where the East may learn somewhat from the West; but the first jesson to learn, it would seem, is the payment of just and equitable salaries to teachers.

There are two freedoms, - the false, where a man is free to do what he likes: the true, where a man is free to do what he ouglit.-Charles Kingsley.

## June and July in Canadian History.

The months of Junc and July are notable ones in Canadian history. They tell of discovery and settlement when the foliage of wide-extended forests was in its brightest green and when the land was fairest of all the montlis of the year for those pioneers of the new world to look upon. These months record successful battles fought to free the country from grasping invaders who sought to sever Canada's conncetion with Great Britain. They tell of the welding of the scattered provinces into a confederation extending from the Atlantic to the Pacific; and cach succeeding year these montlis, with their lengthened days of sunshine and prom:se of abundance, lend swcetness to toil and beget fresh confidence in the capabilities of this strong young Canada.

On the first of June, 1813, the naval battle between the British ship "Shamon" and the U. S. ship "Chesapeake" was fought off Halifax harbor.

June 2, 1866, Canadian volunteers encountered a band of Fenians at Ridgeway, Ont.

June 3, 1889. Canadian Pacific Railway cars entered Halifax.

June 4, 1763, took place the massacre of English at Fort Mackinaw by the Indians under Pontiac.

June 5, 1813, Sir John Harvey defeated a United States force at Stony Creek.

Junc 6, 1891, death of Sir John A. Macdonald.
Tune 8, 1776, a revolutionary force which had invaded Canada was defeated at Three Rivers by Canadians.

June 11. 1894. death of Sir Matthew Begbie, Chicf Justice of British Columbia.

Junc 16, 1755, Fort Beausejour captured.
Junc 17, 1745, first capture of Louisburg.
June 18, 1812, United States declared war against Great Britain.

June 20, 1877, great fire in St. John, N. B.
June 21, 1749. Halifax founded.
June 23, 1813. Laura Secord undertook her perilous but successful journey to warn Lieut. Fitzgibbon of the approacli of United States troops.

Junc 24 (a day memorable in Canadian annals of discovery) 1497, John Cabot discovered the castern shores of Canada (probably Cape Breton Island) ; in 1604 Champlain entered St. John harbor. On this day, in the year 1813 , Lieut. Fitzgibbon with a small force of Canadians captured 500 United States troops at Beaver Dams.
June 26, 1604, began the settlement of St. Croix Island.

July I, 1867, Dominion of Canarla proclaimed.
July, i, 1873. P. E. Island entered the Dominion. Alberta and Saskatchewan to enter in 1905.
July 3, I 608 , Champlain founded Quebec.
July 5, 1814, battle of Chippewa.
July 15, 1870, Manitoba and North West Terr:tories admitted to the Dominion.

July 17, 1793, capture of Fort Mackinaw by Canadians and Indians.

July 20, I793, Alexander Mackenzic having made the first overland journey from Eastern Canada stood on the shores of the l'ac:fic.

On July 20, 1893, a centemial conmemoraticn of this exploration was held at Victoria, B. C.

July 20, 187 I , Britislı Columbia entered the Dominion. On that day a party of engincers left V:ctoria for the mountains to begin the survey of the Canadian Pacific Railway.

July 21, 1836, opening of railway between lat prairie to St. Johns, 1'. Q.. $14^{1 / 2}$ miles long-first railway in Canada.

July 25, 18 I 4 , battle of Lundy's Lane, the blome iest and most obstinately contested battle of the War of I8iz.

July 26,1858 , the final capture of Louisburg by a British army under Generals Amberst and Wolfe, with a fleet under Almiral Boscawen.

July 28,1866 , second . Itlantic cable la d.
July, iz60. a liritish fleet attacked and destroyed a French fleet at Pet:t Roche. Restigronche river. This was the last battle between the French and British in the war for the possession of Canada.

July, 1786, Queen Charlotte Istands named hy Capt. Dixon, of H. M. S. "Queen Charlotte."

The teachers of Chicago do not beg for a raise in salary now becanse they need more books, better clothes, or opportunity for recreation, they ask it becanse they know they earn it, and that they have an inherent right to what they earn. Not only that, but sooner or later the preople will acknowledge that right and find a way to recognize it. I amsider a clear understanding on the part of teachers of this inherent right to a fair share in the wealth they create to be the first pre-requisite for any effective movement to better the conditons of teachers and teaching. Armed with the conviction that they are seeking justice to the children and to the people no less than to themselves, no denial, no rebuff will deter. and they w:11 persevere mutil the entire community recogrizes the essential justice of their claims and scts itself the task of funding a way to gruat them.--Margoret A. Maley.

## Hint to the Physiology Teacher.

An excellent text for a human body lesson is found in Longfellow's " Village Blacksm:th." The smith is the chitdren's friend. Those who have recited the poem have learned to love and respect him. They admire the "mighty man," the muscles of whose brawny arms are " strong as iron bands." The children know the reason. "Week in, week ont, from morn till night," "You can hear him swing his heavy sledge." "His brow is wet with honest sweat." Ifere is the arm made strong by honest work. Suppose the smith worked now and then, instead of week in, week out. Suppose he used a light sledge, and put away the heavy cne. Who can think of others workers who are strong? How can you make yonr muscles strong? What work can you do? We are prond to be able to work. The smith"s work enabled him to "look the whole world in the fact."-Missouri School Journal.

The following levices for aronsing interest in reading are not new, but they may prove useful to some teachers: If interest flags in the reading class and the readers become careless and inaccurate. these faults may often be corrected by "reading for mistakes." If the reader makes a mistake in emphasis, pronnmciation, or in panses, allow whoever sees it to read in his place. This makes the reader more careful and keeps the whole class wide awake. Selected readings are also very helpful. Every Friday afternonn the childten may be allowed to select their own reading from any books or papers they may have access to. This interests them in outside reading matter and makes them anxions in read well in class.-Popular Educator.

The principat objects of school gardens may be said to be, in the first place, that they dispose children favorally toward manual labor, that they give the much needed work supplementary to the confining book training that gencrally oltains in the schools; that they take the children off the streets in the vacation period, and give them something refinite to tho with their leisure moments: and, most important of all, that they give the yomgsters a good ground work of agricultural kiowledge. thus inclining them to seriously comsider farming as a possible occupation, and it is thought that in time this may tend to promote an exodus to the outlying commery districts. and help to relieve the cont niad concentration in the cities.-Somthern Worknan.

Drawing for the Lower Grades - No. VII.

By Principal F. G. Matthews, Truro, N. S.

The remaining rectilineal figures suitable for the lower grades are the hexagon and octagon. All the other regular polygons require the use of either compasses or protractor in construction, and may well be left to Grades VI, VII and VIII.

The hexagon is a very important and interesting figure, as so many pretty and useful exercises may be based on it. It also affords excellent practice with the set-square, and will do more to accustom the pupil to the ready manipulation of this useful instrument than any other excreise. As a first exercisc, the hexagon may be drawn standing on its base, in the following manner: Draw $a b$ (Fig. 19) two inches in length. Place the set-square in the position A and draw of, taking care that the ruler is held firmly and the set-square resting fairly on it. Reverse the set-square to position $B$ and draw be. Mark off of and be each two inches in length. Next slide the set-square from position 1 ,

to that shown by the dotted lines and draw $f($. Reverse the square and draw cd. Nake each of these two inches. Join cd. A good variation of this exercise, and one that requires care, is to draw the hexagon without measuring anything but the base (Fig. 20). Draw $a b$ the required length. Draw of and $b c$ as before. but without measuring. After clrawing af, slide the square to $b$ and draw $b c$. Similarly from the position at be slide the square :o $a$ and draw $a d$.

Now place the ruler along of, and slide the square, resting against it, up to $g$, through which draw a line $f c$. This line will be found parallel to the loase. and will give the positions of $f$ and $c$. Draw $f c$ and $c d$ as before, the points $c$ and $d$ being given loy the intersections with the lines be and ad respectively. Final!y join $\mathfrak{c d}$ as the former exercise.

F:g. 21 explains for itself the methed of drawing the hexagon standing on one of its angles.

In connection with these lessons the talks on angles and degrees should be continued. A regular
hexagon, with diagonals drawn, having been placed in front of the class, easy questions will elicit the fact that the figure is made up of equilateral triangles. By producing the base, the number of degrees in the exterior angle may be obtained, and also the reason for using the set-square in construction. By fitting the set-square into each of the external angles, they may be shown to be all equal.


On counting up the degrees in each, the total will be found to be $360^{\circ}$. Compare this with the square and equilateral triangle. The teacher may then give as a fact the information that in all the reguiar polygons the exterior angles together amount to $360^{\circ}$, and from this deduce the method of finding the value of the exterior angle of any polygon, viz., by diaiding 360 by the number of sides.

The octagon gives an excreise in the use of the $45^{\circ}$ set-square. Questions similar to the above will elicit the fact that the exterior angle contains that number of degrees. Fig. 22 will explain the method of drawing. Other methods requiring the use of compasses, etc., may be left till later.

As with other plane figures in previous articles, these outlines may be used as foundations for design, either for pencil alone or for color work.

The freehand lessons at this stage may introduce the oval and objects baseil upon it. The difference between the ellipse and oval should be pointed out, and the various portions of the curves of the oval drawn on the board to demonstrate the variety of curves obtainable. Practically all the copies required now may be obtained from nature, as the bodies of most birds, and many bud, leaf, fruit and shell forms are of the same general ontline as the egg.

Schools whech have muscmuns will here find them of advantage. as abundance of "copy" may be found in them. As mentioned before, the teachers must use discretion in selection. and not follow detail too slavishly at the early stage.
[It is hoped that these lessons in drawing. so carefully prepared and illustrated by Mr. Mathews, amid many other pressing duties, have been a help to teachers.-EDitor.]

## Clay Modelling in the Primary Grades.

Miss S. A. Sims.

(Under direction of the M. T. T. Association of N. S.)
My experience with clay modelling has shown me that it is one of the things we learn to do by doing. The children's adaptability for the work need not cause the teacher any thought, for in the heart of every child there is the inborn desire to "make things." When left to themselves, children naturally turn to the best material available; hence the practice among small children of playing in the mud, in sand-heaps, etc.-these being the substances that most readily take any shape desired. There are many reasons why modelling in clay can be taught in the public schools with benefit.
(1) Some form of manual training is a necessary part of an intelligent system of education.
(2) Clay modelling is the particular form of manual training best suited to the early years of childhood, the material used being plastic and nonresistant.
(3) It promotes the self-activity of the child; it throws him upon his own methorls of making and doing, and gives hin a chance of asserting his individuality.
(4) Since the child, in modelling, has before his eyes, or in his mind, something which the wishes io copy. his powers of observation and perception, or his powers of memory and imagination are cultivated.
(5) It helps to balance the excess of alostract information, with which the minds of little chikdren are burdened, and makes a pleasant variety in the work of the schoolroom.
(6) A child who is slow to grasp alsitract ideas. by proving, as he sometines does, an expert in manual work, acquires a certain amount of selfrespect and ambition, and is inspited to make greater intellectual effort.
J. Vaughan, in his paper prepared for the manual training section of the World's Fair, $18, f$. says: "Of all the forms of hand and eye training, as a means of education, elay modelling, perlaphs, more nearly approaches the ideal. As a means of expression, it seems to me unsurpassable. If I were bound to take only one form of manal training apart from (lrawing, I shotild unhesitatingly take this, because it cal!s into play more faculties than any other one section."

The queation how the work is to be done presents itself. The problem that confronted one primary
teacher not long ago was dhis: Given a class of children, untutored in the art of clay modelling (or any other att for that matter), a crock of clay wirh no other mater:al whatever-it is reguired in the space of six weeks to produce a collection of models fit to send to the Provincial Exhibition. Tlie teacher in question had no knowledge whatever of the work in hand, but from one of her co-laborers she obtained a few essential princip!es regarding the work, and with these began operations. The children provided themselves with heavy brown paper, or thin smooth boards, on which to monld the clay: The teacher had a larger and heavier piece of wood, on which to knead and cut it. This she learned was best kept in a covered jar, so as to exclude the dust, and could be cut by means of a knife, wire or strong thread. If bought dry, it should be soaked for some time. When ready for use it should be plastic, but not soft enough to athere to the fingers.
The clay was kneaded in the form of a large cube, and from this smaller cube-shaped pieces were cut off and apportioned to the children. Sfter each chikd hatd received a piece of clay, the class received their first lesson in the moulding of common geometric solids as a basis for other forms. The sphere was modelled lyy rolling the clay between the palms, with the fingers turned back. The culbe was fashioned from the sphere be tapping gently on a plane surface, outlining the six sides by the first six taps. The cylinder was made by rolling the clay between the hand and a smooth surface, then flattening the ends by tapping. From the sphere was cut the hemisphere, and from this wete mave birds' nests, cups and saucers, bowls, ete. From the sphere itself were moulded apples, cherries and different varieties of fru:t. From the cylinder were evolved cuming little models of tea-pots, sugar bowls, butter crocks, bottles and vase forms of different kinds. Some of these, made of ordinaty brown clay, were decorated with leaves and flowers made of red or pinkish clay. The cube became an (1)ject of much greater interest, after having dots arranged on the sis sides to represent a die.

The children were found to display the greatest skill in modelling objects in which they were most interested. One small boy, whose brother was then serving in South Africa, mate a remarkable good mondel of the large fe't hat worn lyy the troups. The chideren had previnusly learned the story of lliawatha; and the canoe and paddle made another interesting model. This was made to resemble
birch bark somewhat, by having lines drawn on the sides with a sharp-pointed stick while the clay was still soft, and afterwards laving the crevices lined with brown dye. This scratching and dyeing process was also used to good advantage in decorating vases, etc. Leaves fashioned from those of the commonest trees were first marked out with a stick, then cut with a sharp knife and mounted on square or oval tablets also cut from the clay. One of the class, a boy of seven, astonished his teacher and a few others by moulding from an outline drawing of the flower a calla lily with leaves, without missing any of its natural beanty of form in doing so. He also copied the narcissus with as much success, even originating the idea of covering with soft mud, the straws from a broom, to form the stamens. Another boy made a vase form purely from his own imagination, which was afterwards declared by some one who knew to be " the very latest thing in Paris " along the line of vases.

As the work progressed, the teacher noticed an increase both in interest and skill. Many of the chikdren considered it a very great privilege to continne their work after school hours, and a very serions punishment if they were sent home. There were no critic:sms made on the work of any child, although some of the attempts were very crude indeed. After improvements were suggested, the first model was laid to one side, and a fresh p:ece of clay was given in its stead. At the end of six weeks every child conld make something, and make it very well. Some could make almost anything they tried and make it nicely. But all, whether of ordinary or rare ability, loved the work, and profited by it.

From just such a simple experiment as this, made under the most ordinary circumstances, we are able to reach one or two conclusions: ( I Every child, besides having a natural taste for plastic art. has some natural ability for the same. (2) Some chikcren have more than ordinary ability in that linc. (3) We cannot know what a child can do until he has had a chance to try. (4) Assuming that what has been done can be done again, under the same circumstances, any teacher can get good results in clay-modelling if she is willing to take the trouble.

I have enjoyed the regular visits of the Review for a year, and kindly continne it to my addres. I find it a great aid. not mily in respect to useful and valuable suggestions, but I also find it useiul in keeping me in tonch with the whole field of educational endeavor.-J. O. S.

## The Case of Susie Adam.

Betty is seven years old, dearly loves her school and teacher, and when at home talks extensively of the matters of her class-room.
"Lots of the boys and girls hate 'quotations,' but I like it awfly," she volunteered once.
" And what do you mean by 'quotations? '" asi'ed an inquisitive elder.
"Why, don't yout know? It's something thic teacher writes on the blackboard, and yon learn it, and it helps you all the week, and then the teacher asks you for it, and on Friday you go to the platform and say it."
"Oh, well, make believe this is Friday, and do it for us now."

Quite charmed, Betty rose, mounted an imaginary platform, gripped her little dress, gave a serious curtsy, and said, with lond and elocut onary distinct ness, " Susie Adlam forgets Susie Adam."
" What if she does? Let her. Give us the quotation."
" That's the duntat:on."
"Good gracions! Say it again."
"Su-sic Adam forgets $S u$-sie $A d a m$," repeated Retty, worked up and threatening to become warlike.

Neither quest:oning nor expostulation availed against this statement concerning Susic, and not mutil the teacher herself was interviewed did the mustery resolve itself into "Enthusiasm begets enthus:asm."- February Homan's Home Companion.

John Keble, who wrote the hymn "Sun of My Sonl," was remarkable for the beauty of h:s character as well as for his learning. In the May Delineator Allan Sutherland says: "It was in the second poem printed in The Christian Iear that Keble's famous evening hymm, 'Sun of My Soul,' first appeared-a hymn which voices the sentiments and the prayers of countless Christian hearts as the twilight fades into might and we yield ourselves io sleep and to helplessness. A visitor once asked Alfre:l Tennyson what his thoughts were of Christ. They were walking in a garden, and, for a moment, the great poet was silent, then, bending over some beantiful flowers, he said: ' What the sun is to these flowers, Jesus Christ is to my soul. He is the sum of my sonl. Conscionsly or mensciously, he was expressing the same thought in the same language used by the good John Keble years before when ine gave to the world his great heart hymn, 'Sun of My Soul."

## "Nineteenth Century Literature."

There has recently been published by the Copp Clark Co., Limited, of Toronto, a copy of selections, entitled. Nincteenth Century Litcrature, issucd spec:ally for use in McGill College. The book consists of two parts, the first of prose selections. the second of poems of the Romantic Revival; these may also be had in separate volumes. The principle on which the prose selections have been mate seems an admirable one; it is. in the words of the preface. " to allow some of the great writers of the mineteenth century to tell their own story, or set forth their own joint of view." To this end the select:ons are mainly autob;ographical, and include six of Lamb's essays, bes:des extracts from DeQuincer: Macau'ay, Carlyle. Kingsley. Stevensom. and that charming, and too little known writer. George borrow: The selections are long enough to give a fair :dea of the writer's style, and with the exception of the essay on Koast lig, are mhackneved. The poems are taken from the works of Coleridge, Wordsworth, Byron. Shelles, Keats, Browning and Tennyson. Lovers of these poets will always find selections more or less unsatisfying. but it would be hard to name a better collection for the purpose than that presented here. The notes are chetly historical and hiographeal, and not too full. The introduction to the poems will be found very useful, and a particularly valuable part of the work is the prefatory note by Professor Moyse. We guote a fow lines from this which deal with poems taught in New Brunswick schools:

There are certain things on a higher plane than the mere facts of history or biograpny that the teacher who reads thoughtfully can discern. If, for instance, a slort picce of reflective poctry is taken, the leading idea, the idea perhaps that caused its creation, will generally be found expressed more or 'ess pointedly in it. Thorongh familiarity with the pnem is, of course, necessary, before the keystone of the poetic arch can be pointed out. If Tennyson's poem, "Preak, Break, Break," is chosen. the keystone is found in the words of grief,
"But O for the touch of a vanished hand And the sound of a voice that is still."
irom which the piece is evolved throngin contrasts in which we hear the unceasing voice of the sea (break, break, break), and the joyous voices of those whose lives are so much bound up with it. Three verses of contrast, one of them expanded, and the whole effort lies before us. Or again, to take the song in "The Princess":
"The splendour falls on castle walls,"
:he dominant thought is brought out in the lines:

- "Our echoes roll from soul to soml.

And grow for ever and for ever."
to which the previous portion of the poem again stands in contrast. Or once more, in "Sir Galahad" the line:
"A virgin heart in work and will,"
mirrors the essence of the piece.
It would be a good thing if this book could be used in the higher classes of our high schools and academies. In the harids of a good teacher, it ought surely to fulfil the purpose that its editors hope for it, namely, "to inspire young readers with a desire to know more of the authors studied."
The prose selcctions are edited by John W. Cunliffe, lecturer in English at McGill University, and associated with him in editing the poems is Miss Susan E. Cameron, of McGill, who is a graduate of the St. John Giris High School.
E. R.

It is a very bencficial pract:ce to take a period of time once in a while to work along with the pupils in arithmetic reviews. Dictatc an example of a kind that has cansed much tronble. Wait until everyone has finished, then have answers read. $\Lambda$ s this is a review test. presumably many w:ll have the correct work. Let those who failed, or a convenient number of them, take places at he board, and while thes are there refuluest one of them to explain while the others to the work. Pupils in the seats may act as critics, pointing out any faults which may appear. If many have failed. try another of the same kind after this board work has been finished. Notice the gain when the answer is read: many more should have the correct work now.

Again, have board work. Next time try one of a different kind, and so proceed with a few in this thorough way. Finally collect the papers that are perfect, record names on board for honor, and let those who did not succeed keep papers and tell them to work on such examples montil they scem easy. Encourage them to do home work and to ask for help where they feel weak, and assure them that if they do this all will come out right in the enl.Popular I:ducator.

A teacher in a W'estern public school was giving her class the first lesson in subtraction. "Now m order to subtract," she explainecl. "things have to be always of the same denomination. For instance. we couldn't take 3 apples from + pears, nor 6 horses from 9 dogs."

A hand went up in the back part of the room.
" Teacher," shouted a small boy," "can't you take + quarts of milk from 3 cows?"- Harper's Heckly.

## College Convocations.

## D.ilhousie University.

The anmual convocation this year was held in the law library. In his opening address, President Forrest spoke of the success of the school of mining and engineering, which had forty-four students on the roll during the session, and this year sends forth its first graduate, T. T. Fulton, B. A., as Bachelor of Engineering in Mining. Mr. Fulton has been offered and accepted an important position in the management of a gold mine in the province at a good salary. The president spoke of the gifts to the mining laboratory, which is now in working order. The Truro Foundry and Machine Company presented a Wilfley table, costing over $\$ 300$, and the I. Matheson Co. of New Glasgow have constructed a fine stamp mill for the laboratory. Already Professor Sexton has done valuable work experimenting with new me:hods for the extraction of gold from certain ores.

The new department of civil engineering has inade great advances under the direct:on of Professor Dixon.

In the faculty of arts the appointment of a tutor $i_{11}$ classics has given some assistance to an overworked professor, and has done much to assist students who came to college badly prepared in Greek and Latin.

The crowded state of the laboratories in science is forcing upon the authorities the great necessity of providing new quarters.

The following degrees were conferred:
Bachelor of Arts.-Louise Frances Gerrard, Alice Pearson Gladwin, Euphemia Mclnnis, Ethel Margaret Munro, Ella Mabel Murray, Lulu Marion Murray, Sarah Isabelle Peppard, Minnie Grace Spencer, Caristina Jane Turner, Charles Tupper Baillie, John Barnett, Charles Prescott Blanchard, James Henry Charman, Charles Gordon Cumming, Wilfred Alan Curry, Charles James Davis, Robert Bell Forsythe, William Ira Green, William Ernest Haverstock, Groorge Leonard McCain, Roderick Augustus Macdonald, Robert John McInnis, Daniel Alexander McKay, B. Sc., George Moir Johnstone Mackay, James Alexander MacKean, Murdoch Campbell MrLean, Hugh Miller, Charles Wiswell Neish, Arthur Silver Payzant, Daniel Keith Ross, Frank Frieze Smith. William Dunlop Tait, Harvey Thorne, Herbert Wesley Toombs, Andrew Daniel Watson.
Bachelor of Science.-Laurie Lorne Burgess, Milton De Lancy Davidson, William Clarke Stapleton, William Weatherspoon Woodbury.
Bachelor of Enginecring.-In mining-Thomas Truman Fulton, B. A.
Bachelor of Lazis.-Berton Stone Corey, Horace Arthur Dickey. Percival St. Clair Elliott, B. A.: Lloyd Hamilton Fenerty, William Gore Foster, Ira Allen MacKay, Ph. D.; Roderick Geddie Mackay, Donald McLennan. James Archibald McLeod, B. A.; Claude Lovitt Sanderson, B. A.; Vernon Hastings Shaw, John Wood.

Doctor of Medicine and Master of Surgery.-Mary Mackenzie, Edward Blackaddar, M. A. (Acad.) ; John Archibald Ferguson, B. Sc. (Dal.); Daniel Robert MeDonald, George Arthur McIntosh, Victor Neil Mackay, Alexander W. Miller, B. A. (St. F. Xav.) ; James Alexander Murray, John Ignatius O'Connell, B. A. (St. F. Xav.) ; James Adam Proudfoot, Peter James Wallace.

Bachelor of Arts.-Ad eundem gradum.-R W. Allin, B. A. (Toronto) ; Sidney Gunn, B. A. (Harvard).

Moster of Arts.-R. W. Allin, B. A., by Thesis: "The Romantic Movement in English Literature;" George Archibald Christie, B. A., by examination in philosophy of morals and religion; Henry Arnold Kent, B. A., by examination in psychology and modern philosophy; Thomas George Mackenzie, B. A., by examination in history; Edwin Byron Ross, B. A., by Thesis: "Basis and Functions of the State;" Robert Hensley Stavert B. A., by examination in modern ethics and metaphysics.
Degrees Preaiously Conferred but not Announced.Bachelor of Arts-Thurston Stanley Begin, Thomas Geo. Mackenzie, John McMillan Trueman. Bachelor of LawsRichard Upham Schurman.
The following honours and prizes were announced:
Diplomas of Honour.-Classics-Honours-Charles Wiswell Neish, Murdoch Campbell McLean. English and history-High honours-John Barnett; honours-John Henty Oharman, Robert Bell Forsythe. Philosophy-High honours-William Dunlop Tait. Pure and Applied Mathe-matics-High honours-Robert John McInnis; honoursAndrew Daniel Watson. Chemistry and Chemical Physics -High honours-George Moir Johnstone Mackay.

Diplome of General Distinction.-Distinction - Charles Gordon Cumming.

Medol, Prizes and Scholarships.-Medical Faculty Medal (Final M. D. C. M.) -Victor Neil Mackay. Avery prizeCharles Gordon Cumming. Waverley prize (Mathematics) -Cecil L. Blois. Dr. Lindsay prize (Primary M. D. C. M.) -not awarded. Frank C. Simson prize (Chemistry and Materia Medica) -George A Dunn. MacKenzie bursaryNora Neill Power. Professors' Scholarship-Jean Gordon Bayer, William Keir Read.

## Mt. Aliison Institutions, Sackville.

The year 1904-5 has been the most successful in the history of Mt. Allison. The attendance has been larger than ever before. Some departments have been strengthened, and two new departments. those of domestic science and of engineering, have, for the first time, been in full operation in their new quarters. The various exercises of the end of the year passed off well. The weather was ideal. and visitors and students left in good spirits on May 31 .

In the Academy the commercial department has grown, so that an assistant teacher was employed. Twelve students got diplomas in commercial work, and the same number in stenography and typewriting. Both groups contained several young ladies. One young man graduated in penmansinip and eight were prepared for matriculation. The alumni scholarships for the matriculant making the highest average in mathematics and in Latin and

Greek, or in Latin and French, were for the first time both won by the same student, Edwin Graham, of Digby Co., N. S. Some members of Principal Palmer's staff are not returning; their successors have not yet been announced.

In the history of the Ladies' College this has been a notable year, since in October last the fiftiech anniversary-" the Jubilee "-was celebrated. For this great preparations were made by preparing an elaborate card-catalogue of all former students, giving their present names and addresses. This, of course, remains a permanent record, which will be made continuous. Several hundreds gathered in response to the invitations sent out, and hundreds of others sent messages. The general result was a great revival of interest in Mit. Allison - among former students of the Ladies' College. A special number of Allisonia-the paper of the Ladies' Col-lege-was devoted to a record of matters comnected with the celebration.

Dr. Borden, in his report, amounced that the attendance had almost outgrown even the new accommodation. Their, rolls included 306 students, of whom one-half were boarders. In the MasseyTreble school of domestic sc:ence, Mrs. Treble provided during the year for an extra teacher. In the normal classes twenty-four children from the public schools received instruction, and three young ladics graduated. Une of these has been appointed teacher in the Consolidated School at Kingston, N. B. The elocution department has also employed an extra teacher, and gives evidence of great popularity and success. A graduate of this year and one of last year w:ll pursue their studies in Emerson College, Boston. By means of the existing affiliation these young ladies will complete the:r course at Emerson in one year. In music there were four graduates in piano and two in v:olin. Eight teachers have been employed during the year. most of whom worked over-time, and forty-six practice pianos have been in constant use. The music at the exercises, both of the orchestra and of the combined orchestra ancl choral class, in the cantata "The Crusaders," was by visitors considered the best ever rendered here. There was a precision and finish not usually atained by large groups of amatcurs.

The most notable events in the history of the university during the year were the appointment of the Rhodes scholar for New Brunswick, and the development of the work in the 11 cCl elan school of applied science. As Rhodes scholar, Mr. Frank Parker Day was chosen, who in physique, powers of leading and manly qualifications. comes near to an ideal such as Mr. Rhodes desired. In making an appointment for Permuda, the trustees of the Rhodes scholarship chose Mr. Arthur Motyer, who took his B. A. at Alt. Allison this year. These two young men will go to Oxford in 'September. Mr. Day will probably taken English honors, and Mr. Motyer, mathematical. In engineering, facilities for work in the shops and at the forges have been
provided during the year, and a good beginning has been made. Twelve of the Freshman class were pursuing the first-year course in engineering; of the remaining thirty-one-the Freshmen in Arts -some will take engineering options during their course. Some members also were added to the Sophomore class as students in engineering. Before another year an instructor in civil engineering will be appointed, and probably an assistant in shopwork.
The male students in residence this year numbered over ninety. To afford increased accommodation for another year the fourth storey of the university residence will be finished during the summer. Several rooms in it are already allotted for the ensuing year. The grounds in front of the residence are also being laid out and terraced under the supervision of Professor Hammond.

The University Convocation took place on May 3oth. Twenty-seven degrees were conferred, three of which were on the completion of the course for Bachelor of Divinity (B. D.) Mr. S. A. Worrell, of St. Andrews, N. B., was the wimner of the " alumni honors," the life-membership in the alumni socicty, which is awarded each year to that member of the senior class who makes the highest average during his course. Mr. Worrell is a former teacher, and is also a B. C.L. of King's College, and an admitted attorney of the … B. bar. He expects soon to take up the practice of law. A. S. Tuttle. of Wallace, N. S.. who had taken part in the last thrce inter-collegriate debates, delivered the valedictory. The interest of convocation was increased by an address from the Rev. Hugh Pedley, the distinguished Congregational clergyman of Montreal, who also preached the Baccalaureate sermon on Sunday evening. Chief Justice 广uck, an alumnus of Mt. Allison, also gave a stirring address to the graduates. Both of these gentlemen. with Judge Barker, of St. John, spoke at the annual supper of the Alumni and Alumnre Societies on Monday evening. May 29th. About 160 guests were present. H. A. Powell, 11. A., K. C., and Mrs. Fred. Ryan, of Sackville. the presidents of the two societies, pres:ded. Another interesting speaker was Mr. MacArthur, a mining expert from Glasgow, Scotland, whose niece was one of the university graduating class. He had just arrived from Scotland and stopped for a day or two on his war to the Pacific coast to inspect some mines.

The library of the Ladies' College has grown by about 1,000 volumes during the year. To the university library some valuable addit:ons have been matle, including a set of the Ammal Register. The two Fred. Tyler scholarships of $\$ 60$ each will next year be offered for competition in the senior class.

In general, then. MIt. Allison looks back to a prosperous year and forward with hone and expectation of further development and increased opportunity for promoting both practical seence and the studies that make for culture.

## Acadia Uninersity.

The Acadia institutions have had a very prosperous year. The Seminary sends ont a graduating class of twenty-two, fourteen from Nova Scotia, seven from New Branswick and one from Vermont. The number of students enrolled has been two hundred and twenty-eight greatly exceeding the average of recent years. Principal DeWolfe has worked hard for the institution and for the mental, physical and spiritual welfare of the students. The large and effective staff of teachers associated with him have worked heartily toward the same end.

Horton Academy has also had a most successful year under Principal Sawyer. Diplomas were presented to fonrteen graduates-ten in the academic and four in the business course. The enrolment of students for the year reached one lundred and three -eighty-six young men and seventeen young women. This was Principal Sawyer's first year, and he has made an excellent impression. The attendance has been the largest in the history of the academy

The closing exercises and conferring of degrees at Acadia College took place on Tuesday. June 6. and was, as usual, an occasion of the greatest interest, attracting visitors from all parts of the Maritime Provinces. The graduating class of this year gave signal evidence of their affection for their alma mater by presenting an endowment of \$1.000 for the establishment of a permanent scholarship of $\$ 50$, to be presented at the Christmas holidars to the Sophomore who has made the highest aggregate during his or her Freshman year in the subjects of the arts course.

The total number of students for the year was 157. The degree of B.A. was conferred on 32, and the degree M.A. on 7 .

The following honors were conferred on the graduating class: Classics-James R. Trimble. New Bronswick. Mathematics-Lorning C. Christie, Nova Scotia. Philosophy-Elmer W. Reid, Nova Scotia. English-Annie L. Peck,Victor Chittick. Nova Scotia: Nilton Simpson, P. E. Island. Chemistry and Geology-Ralph R. Strong, Nova Scotia.

The prizes were distributed as follows: Northard Lowe gold medal for highest standard in last three years of college course, James R. Trimble. New Prunswick: Governor General's silver medal Ralph $K$ Strong. Nova Scotia: Kerr Boyce Tupper gold medal for oratory. Frederick Porter. Fredericton: class of igoi scholarsh:p of sixty dollars for highcst average in Freshman year, Thomas J. Kingley. Nova Scotia.

The honorary degrees conferred were: D.C.L., Frank H. Eaton, superintendent of schools. Victoria, B. C.. Dr. Eaton was present to receive his honor. D. D. conferred upon Rev. Atwood Cohoon, Wolfville: Rev. Isaiah Wallace, Aylesford; Rev. Charles K. Harington, Yokolama, Japan: Rev. W. E. MeIntyre. St. Jolin. MT. A. conferred upon Rev.

Wellington Camp, New Brunsw:ck: Rev. M. P. King, New Brunswick; Rev. C. H. Haverstock, Nova Scotia.

Dr. Trotter, in speaking of the college, said this: had been a year of great prosperity. The work was marked with efficiency. The new science course was most successful in its operation. He announced the sum of $\$ 78,000$ had been pledged tothe second forward movement fund.

The feature of the proceedings of this, the sixtyseventh anniversary of Acadia, which was of the greatest interest to the large andience assembled. was the presentation of an address and purse to Dr. A. W. Sawyer on the completion of the fift:eth year of his work as a teacher in the college. The scene when Dr. Sawyer was led to the platform by Dr. Saunders was of the most cordial and enthus:astic character. The large audience rose and cheered, testifying to the respect and veneration with which the aged, but still active, teacher is regarded. Dr. Saunders read an address, and Dr. B. H. Eaton presented him with an album on which was laid a purse of $\$ 1,303$. The album contained testimonials from the many friends and pupils of Dr. Sawyer. testifying their respect and esteem as a teacher, scholar, gentleman, and to his fine administrative ability.

After Dr. Sawyer had made a suitable and feeling reply, addresses were given by Dr. R. V. Jones, E. D. King, K. C.. Hon. J. IV. Longley and Senator King, all of whom warmly acknowledged the great services which Acadia's oldest teacher had rendered to the college and to the country.-Condensed from Press Reports.

## The Cnilersity of New Bruxswick.

On Thursday, June 1st, the Lniversity of New Brunswick completed the most successful year of its history by an encronia of unnsual interest.
The weather was delightful, and the fresh green and white of the new foliage and blossoms gave an added charm to the quiet streets and gardens of Fredericton. Early in the afternoon the crowds of gaily-dressed visitors and black-gowned studenc streamed towards the college grove. climbed the steep, grassy violet-strewn slopes of the terrace, and entered the Greek portico of the gray old building at its summit.

The spacions library on the upper floor was crowded. Promptly at 2.30 the "academic procession." resplendent in hoods of many-coiored silk and ermine, entered the hall. The procession was composed of the graduating class, twenty-eight in number, in gowns and ermine hoods, the candidates for M. A. and higher degrees in red hoods., the alumni, the faculty, the senate, and L. Governor Snowball (in Windsor uniform), the visitor on behalf of His Majesty.

Professor Clawson gave the traditional address in praise of the founders. Enforcing his position. by quotations from Newnan and Arnold, he assert.
ed that the primary aim of a miversity should be not knowledge nor technical skill, but mental culture. He defended the traditional, literary and philosophical studies of a university conrse, and discussed at some length the formation of a course in literature. He spoke strongly in favor of the study of Latin and Greek as part of a literary education, and tonched on the English works which should be studied, and the method in whieh they should be presented. He spoke of the urgent needs of the universty grouping them under headings of Teachers and Books.

He urged the immediate appointment of a professor of chemistry, and suggested the creation of chairs of modern languages and modern history. He coneluded his aldress by an appeal to graduates and friends for interest and support, and a few words of farewell to the graduating class.

Mr. Theodore Rand McNally then read a portion of his essay on "Se:ence and War." and received the Douglas grold medal from Lient. Governor Snowball. The alumni gold medal for the lest Latin essay had been won by Miss Edna 13. Bell, of Moncton; but owing to her absence the customary reading of a selection had to be omitted. The Governor General's gold medal for proficieney in English and French was presented to Miss Alberta M. Roach, of St. Jolur, by Chicf Supt. Dr. Inch; the Ketchum silver medal for engineering, to Mr. Allan R. Crookshank of Rothesay, by Dr. BrydoneJack, of Vanconver: and the Montgomery-Campbell prize for classics to Miss, Matilda M. Winslow. of Woorlstock, by Ven. Archaleacon Neales.

With stately Latin phrases and the eeremonions "capping" of each candidate by the Chancellor. the degree of 13.A., 13. Sc., or IB. A. I., was conferred on twenty-eight persons. Five men receiven the degree of M. A., two the degree of 1 ll. D., and one that of D.C. L. The degree of M. A., honoris causa, was bestowed upon Mrs. J. S. Armstronge, formerly a distinguished teacher in the Fredericton collegiate sehool under 1)r. (ieorge R. Parkin, and afterwards principal of the . Netherwood School for (Girls at Rothesay. Mr. John Irrittain, whose tireless labors for the advancement of seientific study are known and honored thronghout New Brunswick, and whose recent services to the miversity as lecturer in chemistry have been most highly apprec:ated both log professors and students, was, on the unamimous vote of the semate, made an honorary doctor of science.

Professor W. C. Murray, of Dallonsic L Diversity, gave the ahmmi oration. His sulbject was the Relation of the [inversity to the State. It was presented with a elearness. a cogency and a moral earnestness which carried comviction.

The Encenia closed with the singing of the national anthem at aloout half-past five.

In the evening the alommi soesty entertained the members of the grovermment, the sippene court and the graduating class at a most (njoyable dinner in
the Queen Hotel, Specehes and toasts began at midnight and lasted unt!l three o'elock. Meanwhile the boom of the students' eannon and the glare of their immense bonfire from the hill announced to the sleeping eity that the college year of $1904-5$ was ended.

## Try This for a Change.

Little ehildren love to have their efforts noticed and one word of praise is worth a dozen words of censure as an incentive to "try, try again." • In this comection a very pretty idea came to our notice the other day. The teacher of whom we speak has a class of little children in one of the poorer districts of a large city. She was weary of giving stars for good work, placing rolls of honor on the board, and other like devices. It so happens that this teacher has a perfect genius for cultivating flowers. Every_ thing for which she eares grows and blossoms abundantly. In the spring her windows and table are a perfeet bower of hyacinths, tulips, and golden jonquils. The latter are a great favorite with the chiklren, and it was perhaps this fact that suggested the happy idea. Every time one of her little ones has goorl lessons for a whole day, or has been especially quiet and diligent, she places one of the pots of blooming jonquils on lis desk, and allows it to stand there every day until he forfeits it by some carclessness or inattention.

Strange to say, the children think more of the pot of jonquils than a dozen gold stars, and work hard to keep their desks adorned. Small as they are, they seem to appreciate the beanty of this happy thought, and the spots of bright color scattered over the room give it a wonderfully cheerful and homelike aspect.-Popular Educator.

## Timetables in the Geography Class.

()ne public sehool teacher with a bump of ingenuity has put railroad timetables to a novel nsc. She uses them in teaching geograply. Evidently they make pretty good text-books, too, for her boys passed the mid-winter examination with a higher percentase than any other class in that particular school.
"That was becanse they got interested," said the teather. "It is much easier to fix a boy's mind on a timetable than on a regular schoolbook with ent and dried lessons. A stack of timetables piled np m his desk with permission to phan as many trips aromed the work as he likes, stimutates a boy's intagnation, and :s one of the best incentives in the work to an intelligent study of conntries and towns. "-N. E. Eiemers Post.

## All Due to Algebra.

How often we hear men who really enjoyed good opportunities complain that they never had any chance. And what a rebuke to them it is when some poor boy starting with nothing works his way tup by his own effort. A college education is a good thing to have, but it is by no means essential, and where a boy has any real desire to know something, he will find no difficulty in educating himself, in this country. The case told of in the following extract from the Washington Post well ilhustrates this truth.

There is a young nan now receiving a salary of $\$ 6,000$ who a few years ago was a bootblack in New Haven. His rise is due to his own desire for knowledge and to the interest taken in him by a nember of the Yale facuity. This gentleman, while waiting for a train, observed a bright-looking Italian boy with a shine box slung across his arm seated on the station steps, earnestly poring over a book.
He approached the yomngster and asked him if he would like to shine lis boots. The bootblack went to work vigorously, placing the book on the ground close by, where he gave it an occas:onal sharp look while shining with the vigorous and skilled hands. The professor noted his alertness, and asked what book it was that proved so interesting, expecting to hear that it was a thrilling story of "Old Sleuth," or something of the sort. He was surprised when the shiner replied with unconcern that it was an algebra.
"So you are studying algebra, are you?" said the professor.
"Yes, sir, and I'm stuck. Do you know anything about algebra?" responded the youth, both sentences in the same breath.

Now this professor was one of the notable mathematicians of Yale, and it sounded queer in his ears to be asked if he knew anything about algebra.
"Well. I know a little aloout it. What's the matter? Perlaps I can help you."

By this time the shoes were shined and the boy placed his book in the hands of the man to whom intricate mathematical calculations were not difficult at all. It was but the work of a moment to clear the mind of the aspring young calculator, and he fairly danced with) delight.
" Why, I've been working at that for two days," declared the young man. "I thank you very much. sir."
"Now, I'll tell yon what to do," said the gentleman, offering the boy his card. "When you get stuck again, yon write to that address and I'll see that you get straightened out. Remember, now." And the professor rushed off to eatch his train.

Not more than three days clapsed hefore the mail brought a letter stating that the bright-eyed boot-
black had again " got stuck" with his mathematics. And the return mail brought the much-needed help. A few more days and another application came. This kept up for a time, and then the professor began to advise the young man how to improve his condition.
"Leave bootblacking and get a job in a blacksmith shop or some place where you can learn the use of tools," was the instruction. The boy went over to East Berlin and secured a place in a big shop there. The correspondence and the instruction continued. A letter brought the injunction: "Save your moncy." The reply came back: "I am saving every cent I can."

This went on for three years, and that blacksmith's apprentice had come to know a good deal abottt figures. He was a skilful manipulator of all the tools of his trade, and then came a proposition that gave the young blacksmith the happiest moment of his life.

The professor invited him to come to New Haven to become his special pupil, without expense, except for board. The young man felt no hesitancy in accepting it, and the way that he went to work, now that he was relieved of the nine hours in the shop each day, gave the best evidence of how well he appreciated what the professor was doing for him. He was not a student of the university, but the influence of the professor obtained some privileges for him that were valuable. He became not only a skilful mathematician, but a remarkably skilful manipulator of apparatus.

At the end of two years there was an opening for the young blacksmith-mathematician. The General Electric Co. wanted a young man of just his talents and training, and when the professor recommended him a favorable offer sceured his services. The young man went to work just as he went it the algebra five years before. with a vigorous determination to master all the dfficulties in his path, and he did so. In two years he was rece:ving is salary of $\$ 6,000$ a year.-The Pathfinder.

I heard a "specialist" discourse on "Reading for Children," a short time ago. She deplored the fact that teachers too often cater to the child's tase in the selection of stories, instead of rading to them such stories as the old Norse tales, Andersen's Fairy Tales, and others drawn from classics, such as The Siege of Troy: etc. Now some children will 1:sten to and enjoy any story, but the test of popularity is when the masses yield attention, and there is no style of story that is received with such rapt attention as the simple stories containing incidents in the lives of chiklren like themselves-things that might happen to then1. These are what hold the atte:ton of the masses.-Primary Education.

## A Method of Teaching Truthfulness.

That there is in the mind of every pupil a greater or less resistance to evil tendencies, I thoronghiy believe; yet before the teacher can render successful aid to this res:stance she must understand the of intelligence upon the face of a little fellow, ten mental condition which makes temptation possible. . . . . . I shall not soon forget the sudden gleam of intelligence upon the face of a little fellow ten years of age, whom I had occasion to reprimand for an atterpt to copy from a neighbor's slate, when he saw his act in its true light. After some little talk, in which he acknowledged that he could not learn by copying, I asked, " What do you suppose I gave you that question for, Henry, -the answer?"
"I always thought that it was the answer you wanted," he replied.
"There you have made a great mistake. The answer is of no consequence to me at all if you do not comprehend it. The example was given that I might see whether you could reason it out or not. Instead of showing me that you understand it, you bring to me Johnny II.s work, which only proves that Jolmny monderstands the example, if you do not. Now who is going to tell me whether Henry understands or not, if he takes care of his neighibor and neglects himsclf?"

This talk produced the desired effect not only upon Henry, but upon others who showed a like tendency.

But sclools differ as individuals, and in one or two cases I have given a pupil whom I saw making sly attempts to filch from his neighlor, permission to stand where he could more conveniently copy. saying pleasantly (and not sarcastically) that if he thought he could learn more quickly in that way 1 was perfectly willing that he should try the experiment, but that I wished him to be open and truthful about it, and do his copying lonestly, not like a thief.

The very act convinces a boy that by his own efforts alone, and not by those of his neighthor. will understanding come to him; and, moreover, the lesson of honesty is not lost upen him.-M. K. O.. in Am. Primary' Teacher.

A young man being asked to explain why the save up teaching, answered:
"I left teaching because the pupils, the parents, tine school officers and board, and the county treasurer treated me more like an old woman than like a man."
"Well, whose fauh was it?"

## The Heavens in June.

The brightest objects in the evening sky are Arcturus and Mars. At 9 p. m. the middle of this month they are both close to the meridian. The planet is brighter and redder than the star. To the right of Mars and nearly at the same level is Spica. The other stars of Virgo are higher up) and farther west. Below them is the little group of Corvus. Leo lies in the west at a moderate altitude. Below him is Hydra, whose long tail stretches to the meridian under Mars. Ursa Major is high up, extending northwestward from the zenitll. Castor and Pollux are still visible in the northwest and Capella is just setting stili fartlier to the north. On the meridian below Virgo can be seen a part of Centaurus. Its two brighter stars almost equal Aacturus. In the sontheast is Scorpio. The threc stars which lie near the creature's head and the red Antares at its heart are all visible, but its long tail extends below the horizon. The tangle of stars above and to the left of Scorpio form the constellations Serpens and Ophiuchus. Through them runs a branch of the Milky Way. Farther north is a line of fine constellat:ons. Acpuila is low in the east. Its principal star, Altair, is flanked by a smaller one on each side. Higher up and farther north is Lyra, which contains Vega, the brightest star in this part of the sky. Between Vega and Arcturus are Hercules, marked by a figure shaped like the keystone of an arch, and Corona, whose stars form a semi-circle. Below Vega, to the left, is Cygmus. Cassiopeia is beneatlo the Pole. Cephens on the right.

Of the planets.-Mercury is morning star until the $2 t^{t h}$, but not in a gool position for olservation. Senns is morning star in Aries, rising between two and three oclock. and is very bright ; Mars is the principal feature of the evening sly and nearing oppos:tion: Jupiter is morning star in Taurus; and Saturn is in Agnarius, rising about midnight.Condensed from Scientific American.

To bring up the ordinary writing in exere:scbooks to the standard of the copy-book work. the following plan was adopted: The headlines were cut from a few enp-books: these formed hander slips ablow six inches by one inch, and each pupit received me. The slij) was to be retained in the exercise book. Eyery line in writing in the exercise book was now written underneath this model copy. Which was movel down the page as the writing proyressed. liy this means a constant standat d for comparison was kept in close view. Size. sonpe, shape, etc.. of the pupil's writing were inus brought into immediate contrast with the printers slip. Constant supervision and comparison speedily. wronglt a clange for the better, and the remels bear witness to the efficacy of the plan. - Siclected.

## The Review's Question Box.

M. L. W.-Kindly name the enclosed plants for me and tell whether No. 3 is correctly called Crowfoot.

The three plants are Club Mosses, a genus very common in our northern evergreen or mixed woods. The botanical name of the genus is Lycopodium, which means wolf's foot, from a fancied resemblance of the branches or roots of some species to the claws of an animal. The club mosses, of which there are about half a dozen species in Nova Scotia and New Brunswick, are very pretty evergreen creeping plants, discharging in summer and autumn an abundance of sulphur-yellow spores from sporecases situated usually on greyish-yellow spikes terminating the branches. These spores are very inflammable from the oil they contain. On shaking a few spikes of matured spores over a lighted match they burst into flame.

No. I is Lycopodium complanatum, L. (Trailing Christmas-green). No. 2 is L. dendroideum, Michx. (Ground Pine), about a foot high, and resembling a small evergreen tree. No. 3 is L. annotinum, L. (Stiff Club-moss).

The name crow-foot is given not to any of these plants, but to the buttercups on account of the divided leaves.
(i) M. D.-Find the area of a cireular bicycle track which measures eight laps to the mile, measured on the smaller circumference, the track being 20 feet wide.
(2) Sixty yards of carpet, 27 inches wide, are bought to cover a room 23 feet 6 inches by i8 feet. The carpet cost 4s. 6d. per yard, and the remnant sold at 3s. 4d. per yard. What was the cost of carpeting the room?
I. Since the inner circumference gives 8 laps to the mile, it measures $1 / 8$ mile, or 6 fo ft .
Inner diam. $=\frac{\text { circum. }}{3 \frac{1}{7}}=660 \times{ }^{\frac{7}{2}}=210 \mathrm{ft}$.
$\therefore$ Outer diam, $=210+40=250 \mathrm{ft}$.
$\because$ track is 20 ft . wide.
Area of track $=$ sum of diams. $\times$ diff.

$$
\begin{gathered}
\text { of diams. } \times \frac{3 \frac{1}{7}}{4} . \\
=(250+210)(40) \times \frac{22}{7} \times 1 / 4 \\
=1017^{2 n 0}=14457 \frac{1}{7} \mathrm{sq} . \mathrm{ft} . \cdots \text { Ans. }
\end{gathered}
$$

This may also be solved by subtracting the areas of outer and inner circles, but the above is the shorter methorl."

$$
\text { 2. No. yds. carpet recpd } \begin{aligned}
& \text { a } \text { area of room } \\
& \text { width of carpet } \\
&=231 / 2 \times 18 \div 9 \div 92 \\
&=\frac{1}{2} \times 18 \times \frac{1}{3} \times \frac{4}{3}=6223 \mathrm{yds} .
\end{aligned}
$$

The 60 yds. given in the question is evidently a misprint, since this amount would not cover the floor; it should be 80 yards.
Cost of carpet bought $=80 \times 41 / 2=360 \mathrm{~s}$. $=£ 18$.
No. of $y d s$. in remnant $=80-622 / 3=171 / 3 \mathrm{yds}$.
Selling price of remnant

$$
\begin{aligned}
& =177^{1 / 3} \times 3^{1 / 3}=\frac{5200}{9} \mathrm{~s} .=£ 2,17 \mathrm{~s} .9^{1 / 3} \mathrm{~d} . \\
& \therefore \text { Cost of carpeting room } \\
& =£_{18}-£_{2} . \mathrm{I}_{7} \mathrm{~s} .9^{1 / 3}=£_{15} .2 \mathrm{~s} .2^{2 / 3} \mathrm{~d} .
\end{aligned}
$$

## Keeping Our Souls Alive.

A writer in the Cormhill Magazine (reproduced in Litlell's Living Age) indulged in a little playful criticism recently in "A Plea for the Useless." The article in this utilitarian age is well worth pondering over, as it hits off very well the too prevalent usage of considering those school studies that do not help the boy or girl to earn money as useless and "not practical."

Another protest against the utilitarian drift of present day education comes from a well known English educat:onist:
The other day an old schoolfellow of mine, whom I remember thirty years ago in India, wrote to me, giving a London address. I sought nim out and found him Tiving in a garret and gaining his living by selling newspapers in the strect. It was a bitter cold day when we met. My friend had neither gloves nor overcoat. I was full of pity at the sight of him. I asked him to dine, but he declined; he neither smoked nor took wine. What he wanted was a long talk with me on universal peace and brotherhood. He helieved that he had found the secret. When I left my man that afternoon I envied him. He is the happiest friend I know.
This is what always comes before my mind when I hear people talking about education. We are told in every paper, from the Times to the Daily Mail, that the great problem is to keep onir trade. No; that is not the great problem, but how to keep our souls alive. The problem of cducation is not how to teach boy's or girls to earn their living, but to show them how they may avoid spoiling themselves whilst they earn their living. Plato knew this when the distinguished between the artist and the artificer, the mere wage earner.

A little Cleveland tot of three years was put to bed. her first night in New Jersey, by her mother, with the words, "Now go to sleep, darling, and remember the angels are flying about your little cril) and keeping you from harm." A few minutes later the patter of little feet was heard and a little. white-robed figure emerged from the bedroom. "Why, darling, what's the matter?" said the mother. "I don't like the angels." sobbed the iitthe girl. "Why, dearie, why not?" "One o th' angels bit me, ma."

## Ten Reasons for Bird Study.

1. Because birds are sensitively organized creatures and respond so readily to the influences of their surroundings that in their distribution, structure, and habits they furnish naturalists with invaluable cvidence of the workings of natural laws.
2. Because birds, in preventing the unduc increase of insects, in devouring small rodents, in destroying the secds of harmful plants, and in acting as scavengers, are man's best fricuds among amimals. Without their services the eartly would not long be habitable; therefore we should spare no effort to protect them.
3. Because there is an inborn instinct in animats, which, properly developed, will not only afford us much pleasure, but will broaden our sympathies. and morally elevate us.
4. Because birds, being the most abundant and conspicuous of the higher animals, may be most easily studied and observed.
5. Because birds are beautiful in form and color and exhibit an uncqualled power of flight, their acquaintance thus stimulating our love of beauty ansl of grace.
6. Because birds are umrivaled as musicians; them songs are the most cloquent of nature's voices, and bv association may become incxpressibly dear to us.
7. Because the migrat:on of birds excite our wonder and admiration, and their period:c comings and goings not only connect them with the changing seasons, but so alter the character of the bird-life of the same locality during the vear, that their study is ever attended by fresh interest.
8. Because in their migrations, matines, nestbuilding, and home-lives, birds not only display an intelligence that attracts us, but cxhibit human traits of character that create within us a feeling of kinship with them, therely increasing our interest in and love for them.
9. Because with birds the individual lives in the species; the robin's sone we lear in our lowhord we may hear in our old age; therefore birds seem never to grow old, and acquaintance with them keeps alive the many pleasant memories of the past with which they are associated.
ro. Because, in thus possessine so many and such varied clams to our attention, birds more than ans other animals may serve as bonds between man and nature.-Firank M. Chatman.
"A musician out of work, "are you?" said the housekceper. "Well, you'll find a few cords in the woodshed. Suppose yon favor me with an obligato."
"Pardon the pronumciation, madam," replicel the bright tramp, " hut Chopin is not popular with me." -Philadelphia Ledger.

## A Mile With Me.

O who will walk a mile with me Along life's merry way?
A comrade blithe and full of glee, Who dares to laugh out loud and free, And let his frolic fancy play, Like a happy child, through the flowers gay That fill the field and fringe the way Where he walks a mile with me.

And who will walk a mile with me Along life's weary way?
A friend whose heart has eyes to see
The stars shinc out o'er the darkening lea,
And the quiet rest at the end of the day,-
A friend who knows and dares to say
The brave sweet words that cheer the way
Where he walks a mile with me.
With suok a comrade, such a friend,
I fain would walk till journeys end, Through summer sunshine, winter rain, And then?-Farewell, we shall meet again!
-Dr. Henry Van Dyke.

## Some of the Old Would Improve the New.

Is there not such a thing as dissipation in school work? Do not our present courses of study attempt too much? In the grood old school days little attention was paid any subject except the common branches, and of thesc, part:cular stress was placed upon reading, writing and arithmetic. The reading, of course, included spelling. In those schoos days of thirty-five years or more ago, all classes thoroughly reviewed at the begiming of each term the work of the preceding, so long as the same text was in nse. The result was that while boys and girls were not broadened, they were evidently deepcned by knowing a few things well. Nany of the critics of the public schools of the present day say that boys and girls sent out are smatterers-knowing a little of everything and not very much of anything. Isn't too much being attempted in rural schools, in village and town schools, and even in high schoots? Does not the broalening of courses of study in the publice schools at the same time canse corresponding shathows? Again, when you and I were in the old selown, obedience was demanded in the seloobl and in the home. The rod was rarely spared to spoil the child. Has a better way come? Is mupuestioned obedience demanded by parents and by teachers? And to not those in civil anthority permit the law to be overridden and trampled undir foot? This is not an "Old lingy" appeal, but the hope that some of the grod of the past in school work may be restored in present lines. If there cannot be fewer subjects in the present courses, let the"e be some elimination of obsolete and less important text matters, so that what is worth while can be thoroughly mastered and fixed.-T. C. C., in the School Neres.

## CURRENT EVENTS.

A Marconi station is to be established on Sable Island.

The disturbance in German West Africa still continues, and late accounts report a reverse for the government forces.

King Oscar will come to London next month to witness the marriage of his grandson to Princess Margaret of Connaught, King Edward's niece.

An arbitration tribunal is now in session in Paris to award indemnities to those whose interests have been injured by the abandoment of the French claims in Newfoundland.
The railway line now advancing through Northwestern Rhodesia will soon reach Kalomo, the seat of government of that section of the British South Africa Company's territory.

The new province of Alberta has an area of 253.965 square miles, and a population of about 175.000. Saskatchewan has an area of 250,119 square miles, and a population of about 250,000 .
Fierce fighting still continues in the Philippines. The United States forces have recently defeated a Moro chicf who had a following of five or six hundred natives in the island of Jolo. Another uprising is now reported in one of the larger islands.

There are movements of the armies in Manchuria that seem to portend another great battle between the land forces of Japan and Russia. In the meantime the disaffection which is rife among the peasants is said to be spreading to the army in the field, and some hundreds of Russian soldiers are reported to have been shot for insubordination.
Following the new policy of improving the condition of the Poles, the Czar has sanctioned a law permitting them to buy land within the limits of the old kingdom of Poland. They were deprived of this privilege after the insurrection of 1863 , and the land tenure of Poles was then limited to land acquired by direct inheritance.

The construction of an enormons dam across the Tunga Burda, in Pritish India, will form a reservoir forty miles in length. with an area about three times as great as that of the Assonan reservoir in Egypt. This great work is to be undertaken for purposes of irrigation, and, notw:thstanding its enormons cost, it is expecter to be a profitable undertaking.

The King of Spain has been in England, where he received the cordial welcome usually given to royal visitors from abroad, whose visits are an evidence of especially cordial relations between their respective governments and our own. The Emperor of Abyssinia and the King of the Belgians are soon to be received in the same way: and the latter. it is said, will extend his visit to Canada, though here. of course, his journey will be of a personal rather than of an official character.

The Czar has fixed a date for the assembly of the new council of the people, and it is expected that the question of continuing the war will be referred to this council, so as to relieve the rulers of the responsibility of deciding.

The government has approved of the application of the Grand Trunk Pacific for Kai Wan Island, near Port Simpson, as its western terminus.. The railway commission will decide how much land the railway shall have assigned to it for terminal works at Kai Wan, and also at Fort William, on Lake Superior. The work of construction of the new railway will begin at once. The first sod is to be turned at Fort 'Will:am on Dominion Day.

Illustrated lectures on the United Kingdom, prepared for use in the public schools of Ceylon, the Straits Scttlements and Hong-Kong, have proved so successful that the plan is to be extended, and Canada has been asked to join in the movement. By this means it is proposed to give to Canadian school children, and those in the other colonies of the Empire, a more adequate idea of the United Kingdom, its trade, resources and interesting features; and to give the children of Great Britain and Ireland a better knowledge of Canada and other portions of the Empire.

Norway and Sweden have been united for nearly a century under a Swedish King, but each country has enjoyed its own constitution, cabinet, army, navy and other institutions. But for some years there has been trouble between the two countries that boded a dissolution of the union or the establishment of a more practical basis of government. The immediate cause of trouble was a demand by Norway for a separate consular service to secure better trade facilities. This was agreed to by the Swedish parliament, but King Oscar refused his assent. On June 7 th the Norwegian storthing (parliament) declared the un:on under one King dissolved. King Oscar has refused to recognize this action. The Norwegians are preparing for war, and the nations of Europe are interested spectators. It might be Russia's opportunity to reach out westward, were her hands not tied in the Far East. The situation, coming at a time when there are prospects of peace between Russia and Japan, adds another element of danger to the European situation.

The combined Russian fleets met the enemy at the Korean Straits on the 27th of May, and suffered a defeat that amounts to almost utter annihilation. Notwithstanding the loss of ships at Port Arthur, Russia, when the battle began, stood third among the naval powers of the world. At its close, she has fallen to seventh place. The encounter. which will be known as the battle of the Sea of Japan, must stand as one of the greatest in naval listory ; and the name of Togo, the Japanese commander, must be placed beside that of Nelson. Sea power is as needful to the island kingdom of Japan
as it was to our own in Nelson's day, and no victory since Nelson's has been so completc. A few of the smaller Russian ships reached the harbor of Vladivostok, where they are safc for the time; threc escaped, badly shattered, to Manilla; the others were all destroyed or captured, leaving Japan in undisputed control of the sea, and free to attack any part of the maritime provinces of Siberia. Unless peace comes quickly, of which there is some hope, nothing will prevent Japan investing V'ladivostok and taking possession of all the remaining portion of the Russian Pacific coast.

## Music in the North Sydney Schools.

The Review has before had occasion to refer to the remarkable work done by Supervisor C. L. Chisholm in the North Sydney schools to lay the foundation of a thorough musical celucation. A few weeks ago an examination of the pupils was lucld. and so great was the popular interest that the Empire Hall and its approaches were crowded by an eager throng that represented not only North Syilney, but the adjacent towns. The results were very gratifying, and attested the skill of Mr. Chisholm as a teacher, and the excellent methods employed by him to give about the 2,000 school children of the town the foundation of a good musical education. The following is quoted from the Cape Breton Enterprise, which may show the thoroughess of the examination, the pleasure experiencel hy the throng of auditors, and the inestimable value that such a course of training must be to the children:
"The scholars of the town schen)!s were present. and every grade took some part in the programme. Grades II and Ill showed what wonders can be wrought eren with the little ones in scale drill and problems in melody in different keys and rhythnns. Grades III and IS took similar work, lout more advanced, while itr Grates $\mathbb{N}^{\prime}$ ancl $V^{\prime}$ major and minor, angmented and diminished intervals were introduced into the scale drill.
"In the upper grades the stulents tok splemdid!y the scale driff in two complete octaves from $G$ below the staff to frabove, and sang any thre or four given lines of the seale in any combination asked for on hearing the number announced. The exercises in harmony were marvellous, single and double chromatics being introluced and the children singing in four part harmony, no instrmental support being givell.
"The greatest treat of all was, however. reserved for the end. when the chideren sang plantation sones harmonized for piano and strings with chorns ins Mr. Chisholm himself, with Schuberts' Serenates and Pouhcur's The Red Scarf. These showed the splendicl results which can be attained by careful and intelligent training. One of the most notice-
able facts was that the singing was not the work of a few picked pupils, but of the entire grades. At the conclusion Mayor Hackett, on behalf of those present, suitably conveyed the hearty thanks and congratulations of the citizens to Prof. Chishohn. Mr. Chisholn's work is, we believe, unique, but we are glad to learn that many of the teachers at North Svdney and Sydncy 1 Iines are learning his method, so that the system should extend till it cmbraces all the scholars in the provinces."

## Teachers Deserve Better Salaries.

I myself belong to those who think teachers are not being paid enough. I believe there is no way in which we can accomplish so much for the cause of education as by raising as far as possible the salaries of our teachers. In this way we can get the best and ablest teachers in our schools. I you treat teachers like slaves and hirelings, if yotr think their present salarics are large-God forbid-the best men and women will not be eager to fit themselves for this work. If we had a perfect race of the best minds and best hearts, the best courage would be given to teachers, for education is the moblest worl:. The doctor does infinitely more by education than by the nills he gives.-Bishop John Lancaster Spalding.

## SCHOOL AND COLLEGE.

The Nova Scotia normal school will close on Thursday, June 29.

Mr. W. J. Rose, of Wesley College, Winnipeg, is the Rhodes scholar from Manitoba for this year.
Mr. W. E. MacLellan, formerly inspector of schools for Picton County, and for the last five years editor of the Halifax Chronicle, has been appointed post office inspector for the province of Nova Scotia.
Mr. L. A. DelVolfe, whose articles on mineralogy and physical geagraply in the Review have been so helpful to teachers, has resigned his position in the North Sydney Academy and has been appointed science master in the Truro Academy.
Miss Bessic Young, recently a student of Mt. Allison Ladies' College, has been appointed teacher of domestic science in the Macdonald Consolidated School, Kingston, N. B.

The Macdonald Consolidated School at Tryon, P. E. I., is working satisfactorily and has a school attendance which $i_{5}$ steadily increasing. The one van in use cost $\$ 160$ and carrics 28 children.

Sixteen students from the Maritime Provinces have graduated in Medicine at MeCill University, Among these were H. C. Mersereau, son of Inspector (i. W. Mersereau, Doaktown, N. Bh., who won the Ifolmes nectal for the highest aggregite in all subjects of the medical curriculum. He has been appointed on the staff of the Muntreat Creneral Hospital. Other students who won lumors were H. C. Burgess, Shefficil Mitls, N. S., and 11. A. Leslie, Souris, P. E. I.

Miss Madge J. Ricketson, of Hatfield's Point, N. B., now attending the Macdonald school at Guelph, Ont., has won a scholarship in nature-study.

New Brunswick teachers who wish to become acquainted with the latest phases of manual training should not forget the vacation course conducted by Supervisor T. B. Kidner, to be held in the Normal School, Fredericton, from July 5 to 29.

Miss A. Gertrude O'Brien, the efficient teaoher of manual training in the Woodstock, N. B., schools, has resigned her position in order, says the Sentinel, to accept a similar position in Kentucky.

Mr. Ernest Robinson, principal of the Kings County, N. S.. academy, has resigned in order to take a science course at Acadia college. Principal W. A. Creelman, of the North Sydney high school, has been appointed to the vacant position.
Lalia E. Killam, teacher at Cape Fourchue, Yarmouth, N. S., with the help of her friends of that and neighbouring places, theld a social and sale on the ist of June, and raised the sum of $\$ 23.50$, which will be used for equipments for the school.

Mr. J. H. McCarthy, late principal of one the schools in Winnipeg, has been appointed librarian of the new Carnegie library in that city.

Mr Wm. Brodie, A. M., mathematical master in tine St. John, N. B., high school, ha's resigned his position, to take effect at the close of this term. Mr. Brodie will visit during the summer, Winnipeg and other western cities, and on his return will be associated with his brother, Mr. Neil Brodie, architect, of St. John.

As Laval University, Quebec, has not nominated a cand:date for the Rhodes scholarship for 1905, the appointment has been vested in the hands of the McGill University corporation. This will make three representatives for MeGill at Oxford.

The members of the New Brunswick Legislature and Board of Education have been invited to visit the Macdonald Consolidated School at Kingston, Kings County, on the ${ }^{15}$ th of June. The school offers a fine object lesson for the establishment of centralized schools in other sections of the province.
At the recent meeting of the Bitish Columbia Teachers Institute at Revelstoke, April 25-27, it was decided to hold the next year's convention at Victoria. The following officers were then elected: President, F. H. Eaton Victoria, ist Vice-president, J. I. Gillis, Victoria; 2nd Vice-president, Miss Laveon; 3rd Vice-president, A. Gilchrist; Treasurer, E. H. Murphy; Secretary, Miss Cann. Executive Committee: Miss Burns, Nanaimo; R. R. Watson, Tolmie; B. S. McDonald, Ladysmith; Miss Marchant, Victoria; Miss E. Rogers, New Westminster.

## RECENT BOOKS.

Mediaeval and Modern History: Revised cdition. By Philip Van Ness Myers, author of "Ancient History," "A General History," etc. Cloth. xvi+751 pages. Illustrated. Mailing price, $\$ 1.65$. Ginn \& Company, Boston.

The revision of this important historical work, following closely upon the revised edition of the "Anciant History" (in 1904) by the same author, gives a connected and remarkably clear view of the history of the world up to the present year. Both books are designed to meet the use of students; but the general reader and busy man of affairs will find in them a concise and interesting narrative of the progress of the human race without those irrelevant details which appeal rather to the memory than to tine intelligence. The author's clear style, his wonderful grasp of the great movements that have affected human society and his impartial treatment of national questions win for him the confidence of the reader. The last hundred pages of the book, where modern conditions are dealt with ,afford striking evidence of the author's power. The clear text and abundant illustration are noteworthy features of the book.
Gipsy Stories and Stories of Antonio and Benedict Mol. From Geo. Borrow's "Bible in Spain." Linen. Pages 112 and 120. Price 8d, each. Blackie \& Son, London.
These stories are selected from Borrow's delightful book, "The Bible in Spain," a book which has the merit, as the author believes, of being the only one in existence which treats of missionary labour in that country. The stories are quaint, the style vivid, and the reader's interest soon absorbed in the characters and descriptions of a book that is unique in many respects.
Object Lessons in Elementåy Science. Stage V. By Vincent T. Murché. Cloth. Pages 282. Price 2s. Macmillan \& Company, Ltd., London.
The attention of our readers has been directed in the review of previous "Stages" to the improvement that has been effected in these revised editions of nature study lessons. The present volume deals with the various forms of matter; heat and its distribution; food-its composition and nutritive value; clothing; the economic products of plants; animal structure and adaptation. The value of the lessons depends upon experiment and illustration to which careful explanation is given in the text.
Student's American History : Revised edition. By David H. Montgomery. Cloth. 6נ2+lvii pages. Illustrated. Ginn \& Co., Boston.
This book, written in the same interesting style as that which characterizes the author's books for more elementary grades, is broader in scope and more philosophical in treatmont. In this revised edition many parts have been rewritten, especially the political history of the country and the influence of the west on the development of the nation. New maps and illustrations have been added.
Tue Foreign Traders' Correspondence Handbook. By Jas. Graham and Gco. A. S. Oliver. Cloth. Pages 363. Price 3s. 6d. Macmillas \& Co., Ltd., London.

This useful handbook is published for the convenience of English speaking firms doing business with French, German and Spanish traders. It shows how to build up simple bursiness letters in these different languages and how to carry on transactions connected with the exportation and importation of goods. It is an excellent book for any commercial student desiring of enlarging his sphere of influence.

Howthorne's Tanglewood Tales. Edited by W. H. D. Rouse. Linen. Pages 120. Price Sd. Blackic \& Son, London.
The book tells the Greek legends, "The Golden Fleece," "The Minotaur," and "The Dragon's Teeth," in a mamner natural and familiar to the children of today.
Macmillan's New Globe Readers. Book II. Linen. Pages 155. Macmillan \& Co., London.
These books, beginning with Primers and Infant Readers, which deal with the combination of vowel and consonant sounds into easy words, proceed to more difficult forms and gradually seek to awaken an interest in intelligent and expressive reading. They are attractive in matter and appearance.
Le Voyage de Chicot, par Alex. Dumas, pere. Edited by Geo. Heyer, M. A. Linen. Pages 36. Price 45. Blackic \& Son, London.
A short but exciting story. Chicot, a privileged favourite of Henri III, is entrusted with a letter to the King of Navarre. Knowing that it is a dangerous mission he destroys the letter after having committed its contents to memory. The journey justifies his anticipations of danger.
How the United States Became a Nation. By John Fiske. Cloth. 254 pages. Illustrated. Mailing price, 60 cents. Ginn \& Co., Boston.
The formative period of United States history is briefly and clearly treated in this volume, which sets forth the principal events, beginning with the infancy of the ration In something less than two hundred and fifty pages the story of a great world power is told, and the condensed yet vivid narrative will command the attention of scholars as well as of general readers.
Latin Composition for Secondary Scheols. By Benja$\min$ L. Dooge, Ph. I). Volume 1. Clotli. Pages 13i. Price 55c. Volume IT. Clotl. Pages 1go. Dailing price 65 cents. Ginn \& Co., Doston.
These books combine the systematic presentation of syntax with exercises based in Part one on Ciesar's Gallic war and Parts two and three on the text of Cicero's Manilian Law, Catiline I-IV and the Archias. The exercises are intended to be used in connection with the standard Latin grammars, to which constant reference is made, and are accompanied by many practical hints and suggestions which will do much to lead to a clearer knowledge of the language and to a surer application of its principles in composition.
Selections from Standard Freneli luthors, A reader for first-year and second-year students, witin notes, biographical sketches, and vocabulary. IBy Othon Goepp Guerlac, assistant professor of Freneh in Cornell University. Semi-flexible cloth. 214 pages. Mailing price, 55 cents. Gimn \& Co., binston.
Moliere, Pascal, La lontaine, Victor IIugo, Bossuet, Voltaire, Rousseau and Renan,-ihese are a few of the athors represented in this handy solume of selections. The aim is to give the student an aurtuintance with those writings which really constitute French literature. The value of the work is leightened by the short liographical sketches whicl precede the selections, and is denigned primarily for students, in secondary schools and in colleges, who are able to devote but a year or two to the study of French.

Anedotes Fachles et Poésies: For class usc. By O. B. Super. Semi-flexible clotin. Pages 78.

Hans Arnold's Aprilwetter. Edited with introduction and notes by Laurence Fossler. Semi-flexible cloth. Pages 14.

Friedrich Gersfacker's Irrfahrten. Edited with notes and vocabulary by F. B. Sturm. Semi-flexible cloth. Pages 203. Price 45 cents. D. C. Heath \& Co., Boston,

Chatcaubriand's Atala. Edited with introduction, notes and a vocabulary, by Oscar Kuhns. Semi-flexible. Cloth. Pages 120.

The above convenient little texts for French and German students thave recently been published as additions to Heath's "Modern Language Series." The "Anecdotes I'aciles" and "Aprilwetter," consist of stories which pave the way for the more difficult authors' selections which follow.
Lectures Francaises in Geography and History. By W. Mansfield Poole, M. A., and Michel Becker. Cloth. Pages 137. Price 2s. 6d. Blackie \& Son, London.
The fine engravings, clear text, and good paper and binding of this book, attract the young reader, and the good literary style and fresh descriptions show how interesting a book on geography and history can be made for pupils of twelve or fourteen years of age.
Shokespiare's Henry VIII. Cloth. Illustrated. Pages 180. Wice is. Blackic \& Son, London.

This edition is called the "Picture Shakespeare," each volume containing a frontispiece in colours and numerous black and white illustrations. The volumes are also provided with brief introductions and explanatory notes.
How to Telf, Stories to Children. By Sara Cone Bryant. Cloth. Pages 260. Houghton, Miffin \& Company, Boston.
This little book will prove a great boon to teachers, as well to those who have a natural gift as to those who are diligently striving to acquire the "knack" of telling stories (t) children. To the latter it is especially suggestive and helpful. It deals aptly with the purpose of story-telling in school; the selection and adaptation of stories and how to te! then; and then gives numerous examples for the kindergarten and earlier grades.

The President's Report of Chicago University (published by the Chicago University Press), is an interesting document of 260 pages (bound), contaming full information of every department of work in that institution.

The following books received uill be reviewed in the next number:

Specimens of Letters. By A. S. Conke \& A. R. Bentham.
American Phonography. By Wm. L. Anderson. Ginn \& Co., Boston, Mass.

Tue Winged Helmet. Iy Harold Stecte Mackaye.
Stingalree. By E. W. Hornung. Copl, Clark \& Co., Toruntu.

## MAY MAGAZINES.

Littcll's Lia'ing Age (Poston) reproduces in its issue of June 3 Professor llolland's article. Neutral Duties in a Jlarine War, as illustrated by Recent Esents-an article that is of timely interest at present to the nations of the

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World. The Age also prints in its issue of June io Mr. Mallock's article on The Reconstruction of Religious Belief, one of his most notable contributions to current religious discussion. .The Chatauquan for June is a Tree number entirely devoted to special articles upon forest preservation, tree planting, the use of trees in the adornment of streets and home grounds, and kindred subjects. This number wilt be valuable alike to tree lovers, tree growers, tree users, civic improvement and other clubs.. The June Dclintator has a varied and interesting table of contents, supplemented by a complete summary of the seasor:'s styles. Dr. Murray discusses the care of the eyes and cars in a paper that will appeal particularly to young mothers and those who have the care of children. Newman's hymn, "Lead, Kindly Light," is the subject of a paper by Allan Sutherland in the saries Famous Hymns of the World. In addition, there are house plans and housefurnishing ideas, and many pages devoted to the particular interests of the home, including, among other features, a paper on The Practical Side of the Wedding, and a variety of sugges,ions for kitchen economy... The Canadian Magazine for June is of more than wisual interest, especially to Canadians. It enntains an article on "The Nova Scotia-ness of Nova Sectia," by Professor Macmechan, an account of the interesting career of Dr. Robert Tait McKenzie, athlete, surgeon, wri:er, aud seulptor; Theodore Roberts has a story of the Labrador Coast, and a short poem, and the Rev. WV. C. Gaynor tells a tale of the Indians of Passamaquoddy: Articles on the growth of the city of Winnipeg,
the distribution of Canadian Public Documents, and some netes on the Natural History of British Columbia contain uscful information... The famous writer on nature subjects, John Burroughs, contributes to the June Atlantic a paper on the part played by the colours of animals, especially of birds. in maintenance of the balance o flife. Topies much discussed at present are treated of in an article on "Generosity and Corruption," by G. W. Alger; one entitled "The Cause of South American Revolutions," by G. A. Chamberlain. and "The Superannuated," a short story.

## Busiuess Notice.

It is not convenient this month to enclose our usual reminders to subscribers stating their indebtedness to the Revems. Those who are in arrears will kindly remit the amounts due without wating for a written statement. The majority of our subscribers do this, and we wish all wonld make it a rule to do so. It would save us trouble, and they woukd avoid receiving a bill which some look upon as a reproach, although it is not so regarded by business people. The best way, however, is to pay for a journal when it is known that payment is due. The number on the address of each subscriber tells the date up to which the subscript:on is paid. Thus 217 is the number of this month's Review, and subscribers can easily tell by looking at the nimbers whether they are paid in advance or are in arreas.

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[^0]
## Language Drill.

It is not good to use sentences which are not correct, and then ask for the proper efpivalents. The child may confuse them afterwarts, and is as likely to tse the wrong form as the correct one. Drill upon correct expresstons such as the following and others until your pupils will the them from habit: It is I ; it was I. It is he; it was he. . 1 t is she : :t was she. It is we; it was we. It is they; it wats they. It isn't 1 ; it wasn't 1. It isn't be ; it wasn't he. It isn't she; it wasn't she. It isn't they; it wasn't they. Isn't it I? Wasn't it 1 ? is it not 1 ? Was it not I? lsn't it he? Wasn't it he? is it not he? Was it not he? Isn't it she? Wasn't it slee? Is it not she? Was it not she? 1snot it we? Wasn't it we? Is it not we? Was it not we?

## EDUCATION DEPARTMENT. PROVINCE NEW BRUNSWICK.

## OFFICIAL NOTICES.

## Departmental. Fxaminatman, ygos.

(a) The Iligh School Entrance Examinations will begin at the Grammar and Superior Schonls on Monday, June 10th. Principals who wish to be supplied with question papers are requested to motify the Chief Superintendent not later than May zotia as to the probable number of candidates for this examination.

The Lieutenant-Governor's Medlals are to be enmpeted for at the Ifigh Scloon Entrance Examinations in accordance with instructions given in Supplement to Regulation 46 , a copy of which will be sem to any teacher who may apply for it w the EJJucation ()ffice.
(b) The Normal School Closing Examination for the French Deportment begins on Tuesday, May 23rd, at 9 o'clock a. m.
(c) The Normal School Closing Examinations for License and for Adzance of Class will be held at the Normal School, Fredericton, and at the Grammar School buildings, Chatham and St. John, beginning on Tuesday, Jume I 3 th, at nine o'clock, a. m.
(d) The Normal School Entrance Examinations and Preliminary Examinations for Advance of Class, the High School Leazing Examinations and the University Matriculation Examinations wilf all be held at the usual stations throughout the Province, beginning at nine o'clock a. m. on Tuesday, July 4th.

The English literature required of candidates for Class I in the Closing Examinations for License, and of candi. dates for the Matriculation and Leaving Examinations is Shakepeare"s " Hamlet" and ""emnyson"s "Princess."

Candidates for all the examinations beld in July must send in their applications to the Inspector of the District in which they wish to be examined not later than the atth of May.

A fee of Onc Dollar for the Normal School Entrance and Superior Class Examinations, and of 'Two Dollars for the Marticulation and Leaving Examinations, must he forwarded to the Inspector with each application. Forms of application may be obtained from the Filucation Office or from the Inspectors.

Examinations for Superior School License will be held both at the June and July examinations.

Fior further details in regerd to the Departmental Examinations, see Schorl Manual, Regulations 31, 32, 45 and +6.

J. R. INCH,<br>Chicf Superintendent of Education.

[^1]
## Students Can Enter At any Time

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St. Johr, N. B.

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Tilis number of the Review is issued about the first of August, and makes one number for the monthe of July and August.

Mhsy teachers will take charge of schools during the approaching new term for the first time. The Revirn wishes them that success which is the result of earnest, thoughtiul and enthusiastic work.

Fern particulars of the meeting of the Nusa Scotia Provincial Educational Convention will be found on another page. The programme is an
attractive one: the time chosen is one that should produce good educational results-when teachers are fresh from a vacation of nearly two months: and ready to put new ideas into practice.

Often we hear of teachers who get up entertainments in their schools the proceeds of which go towards providing apparatus, repairing the school, or other like purpose. This should not be the way to appropriate these funds. The trustees should meet the teachers half way, and provide the necessary materials for proper school work. The money raised by entertammens should be expended for pictures and other means of decorating the school rom, forming the nuclens of a library or making additions to it, or providing some article of school furniture no: included in the outfit.

Mesins. J. \& A. Ac.luhinx ate again doing business a: their oll stand. Vrince Willian street, St. John. Ifter the lestruciive fire of last winter. which left little but the walls of the building standing, the firm, with characteristic enterprise, immediately began the renovation of the establishment. This will rencler the new premises more commodious than the old. with hetter appliances for carrying on their book. stationery and publishing business.

Mr. D. R. Jack, editor of Acadicnsis, after his: prolonged absence in Europe. has just issued a domble number of this excellent quarterly. The table of contents is an inviting one, embracing sketches of travel, poems. historical articles and other matter. with photographic illustrations. Eurnpe as Seen by an Acadian is a graphic sketch of Mr. Jack's travels, and his impressions and photographie views of Russia will be found especially interesting. Another article that will engage the attention of many readers is the late Mr. Edward Jack's accome of an Expedition to the Hearlwaters of the Little South West Miramichi, edited by Drof. IV. F. Ganong, a task which that industrious exploror and scientist has evidently found congenial.

The readers of the Review will be interested in the advertisements of new books found in this number. These embrace many desirable works that have been tested in the schools and found to meet the needs of teachers and pupils. Among these are the little History of Canada, published by the Copp, Clark Company in a separate form, with an appendix of the history of Prince Edward Island, by Miss H. M. Anderson. Miss Anderson has accomplished in a remarkably clear and concise manner the difficult task of writing a brief but connected account of the Island's history.

The History of New Brunswick, published by W. J. Gage \& Company, has won its way in the schools of that province, and has become very popular with children on account of the clear and easy style in which it is written. It is not an array of facts and dates alone, buit a readable account of the events of the province so arranged as to make history interesting and intelligible to children.

## Perfect Attendance.

It is worth while for pupils to cultivate the habit of faithful, punctual attendance at school. The habit so formed will be a valuable possession to them in after life. It will be a great element of future success and will add to their own happiness and the happiness of others. If more people realized the importance of being punctual to engagements at all seasons and in all places; of answering letters promptly and courteously; of paying their debts and meeting other obligations on time, things in this life would work more smoothly. There would be fewer naughty words said, fewer ruffled tempers, and a much better feeling would prevail among friends and neighbors.

The home and school are the places where a foundation must be laid for these and other good habits that make life more useful, more enjoyable. The following instances show what good results were accomplished by these two agencies, the home and the school, to secure punctuality of attendance, and the immediate rewards that resulted:
"Lester Thomson of Montreal, a lad of sixteen, received from the school board of that city a gold watch. This was because for nine years he harl never once missed a day at school and never once was late.
" A girl at Lee, England, was recently awarded a gold medal for seven years' perfect attendance at school.
"Mliss Bonnie White, says the Pathfinder, Washington, who recently graduated from the high school of Paris, Texas, was awarded a gold medal by the school board for a perfect record covering her entire public school life of II years. She was neither absent nor tardy a single time from the day she entered the primary class until she graduated."

## Visits to Schools.

A visit was made to the Macdonald Consolidated School at Kingston, N. B., on the 15th of June in company with members of the New Brunswick govermment and legislature, educationists and representatives of the press. The appearance of the building, class rooms and grounds were fitted to give a fine object lesson to the visitors. The excellent organization and management of the principal, D. IV. Hamilton, and his capable staff of associate teachers were apparent both in and out of doors, especially in the school gardens which were admirably laid out and cared for. So attractive had each pupil's plot of ground become to him or to her, that recess and other available time were spent in the care of the growing plants. The pupils had taken great interest in the measurements, laying out of beds, and the various practical exercises connected with the care of the gardens. Not less interest did they take in the afternoon exercises in the school audience room where they listened to addresses by Lieutenant-Governor Snowball, ex-Governor McClelan, Premier Tweedie, Supt. Inch and other speakers. The distribution of the prizes given by Premier Tweedie for the best essays on the history of the province and county, supplemented by others from gentlemen present, was an interesting feature of the exercises.

I visited a schoolroom in Winnipeg, recently, where no less than seven nationalities were represented. The teacher was quiet, but alert and sympathetic. Every eve in the rom was directed, not to the stranger present, but to her, and I soon changed my position where I could study both pupils and teacher. The cause of the pupils' interest was soon apparent. The teacher's face was a study as she directed every movement of the little foreigners. Genuine sympathy and tact were shown in her every feature and gesture. Success in pronouncing new words (it was a reading lesson) was rewarded with a flash of recognition which seemed to say "bravo! well done:" and it brought an answering look of gratitude
from the pupil who was trying with all his might to earn that recognition.

Here is a letter that a lad just twelve years of age had written in his exercise book. He was a Polish Jew and had been in Canada and at school less than ten weeks. I asked for a copy of the letter and it was produced in a plain vertical hand:

> Strathcona School May 18th

## Dear Mother.

I goan to school two montch I can spek little English. I can read a book and write. I come from Possia two montch an a haf. May teachern good learn me, dat tetchern is nice teachern. The teachern spek 1 learn quick English. I tiving an Winipeg. I like dat country very much. I writing leatr esterday an Possia. Your living son

Moses.
Every young reader of the Review can make out the somewhat broken English of this letter. Is it not a pretty good attempt after two months of school? The factors at work in this class were,each pupil was very much in earnest to get a working knowledge of English; each was interested, and each one regarded his teacher as a superior being. I asked the superintendent of schools on what principle the teachers were chosen for the children of the foreign classes. "Not from their experience as teachers," he said. "We rather prefer to have them without experience if they have the qualities that win the affection of their pupils." A very good principle in the choice of teachers everywhere.
"What I say is this-the democracy has to learn manners, and the school does not teach manners," is the opinion of a noted English educationist given, after a year's travel through the United States, to a representative of the Montreal Witness. It may be true of a great majority of schools in the United States. Unfortunately it may be truc of many schools in Canada. But I have visited many sehools recently in the Dominion and I was impressed with the good manners of the pupils. In nearly every instance the stranger, as is natural, was gazed at attentively on his entrance. But there was no rude staring him.out of countenance, and the pupils soon became absorbed in their work if the teacher attended to it; and this is what a visitor wishes to see when he enters a schoolroom. Occasionally the pupils betraged a look of too great consciousuess, but this might have been a reflection of the teacher's moorl. I should judge so, for this was what I saw in another school: In company with the superintendent I visited the principal's room of a large school in the leading city of the west. Forty pairs of eyes
of boys and girls glanced in our direction as we entered, but without the slightest consciousness, seemingly, of our presence, and were then bent on the teacher as he conducted the recitation. As we took our seats, two lads who had noiselessly glided to the platform relieved us of our hats and umbrellas and were back instantly in their seats, reciprocating with a smile our nod of recognition of the courtesy. There were many glances turned our way during the recitation, but the eyes showed, not conscousness of themselves or their visitors, but an earnest self-centering on their work. At recess the superintendent beckoned a girl to the front and engaged her in conversation. A boy quietly brought a chair for her. Teacher, visitors and scholars mingled together during the recess, as well bred people do in a drawing room; but when any advances were made the teacher or visitors initiated them. What an agrecable impression such a school makes, and how one wishes time were taken everywhere to get such results, even if we have to draft anew our courses of study.

## Suggestions for Seat Work.

I. Pupils write lists of names of objects in the schoolroom beginning with a certain letter. Take, for example, the letter $c$. The list will be chair, curtain, chalk, ceiling, etc.
2. Write all words possible derived from the same root words, as: hope, hopeless, hopeful, hoped, hopefully, etc.
3. Write a list of geographical names each beginning with the last letter of the preceding word, as British Columbia, Alberta, Andover, Regina, etc.
4. Take a short word, as reader, and make as many words as possible from the letters in it as: ear, red, rear, dear, are, etc.
5. Let the small chitdren mark familiar words in newspapers and magazines.
"Busy work" or "seat work" should have a purpose beyond merely keeping the child busy.-Scl.

Until a good library is attached as a matter of course to every one of our elementary schools, a great opportunity of refining the taste and enlarging the knowledge of the young will continue to be wasted, and the full usefulness of those institutions will remain unattained. After all, it is the main business of a primary school, a chief part of the business of every sehool, to awaken a love of reading, and to give children pleasant associations with thoughts of books.-Sir Joshua Fitch.

## The Summer School

The Summer School for the Atlantic provinces met at Yarmouth, N. S., from July ifth to July 28th. The cool, bracing weather that came with the breczes from the Atlantic was grateful and refreshing, especially to those who were from inland situations. The beantiful scenery in and abont Yarmouth, the fine residences, well kept hedges and lawns and luxtiriant foliage, were a constant sonrce of delight. An occasional fog wrapped the town in its mantle, but the fine weather when the sun made its appearanee could not be excelled anywhere. The citizens had their plans admirably arranged to ensure the comfort of their visitors. A reception, an excursion down the harbour, a drive abont the city and its environments, with mumerous other attentions, enabled the members of the school to enjoy in a very pleasant and social way the meeting with citizens and to sce all objects of interest in and about the town. The outings wer? so arranged as not to interfere with work. It is probally quite safe to say that in the whole nineteen years of the school no session has been held in which better results were obtained in the special subjects of the school. Every day there were classes from nine to one oclock, and often the rooms were crow led with eager students, and the laboratory and field work were of great service to them.

The English literature class, conducted by Miss Eleanor Robinson, was, as usual, of absorbing interest to the members of the school. The course in plant study, by. Mr. G. L. Hay, and for the latter part of the session by Mr. J. Vroom, supplemented 1, frequent excursions afichl, gave special attention to the life and enviroment of the vegetable world. I'rofessor L. W. Bailey, in addition to his subject of geolngy: also gave lectures on zoology in the alsence of the regular teacher. Itis public lecture on the greokgy and physical geography of Nova Scotia was an excellent and instructive address from a master of the subject such as Dr. Bailey. Mr. F. (i. Matthews class in drawing was of the greatest interest to many who devoted their entire time to the subject : and his instruction in manual training and to the amateur class in photography were of great benefit to those interested in these subjects. Dr. Turnbull, of Yarmouth, gave a very practical course in physiology. The reception at his house, with an exhibition of the X-ray, was one of the most enjoyable features of the session. The chemistry and physics classes. under the charge of Mr.
R. St. J. Freeze and M. J. E. Barteaux respectively, gave an excellent opportunity for practical work in these subjects.

The evening meetings and discussions were very interesting. The educational address of Dr. Inch was listened to with marked attention. Principal Soloan's hints to teacher and pupil how to utilize vacations, called forth much consideration and will be discussed in a future number of the Review. Other seasonable topics were presented, and the evening by Dr. W. H. Drummond, the poet of French habitant life, will long be remembered for the rare intellectual treat it afforded.

In summing up results of the school one can dwell with pleasure on what led to success: The tact and industry of the president and secretary, Mr. J. D. Seaman and Mr. W. R. Campbell, whom the school wisely re-elected to these positions; the excellent local organization, due to the foresight of the council and citizens, Principal Kempton with his staff of associate teachers, and the local secretary, Mr. Geo. IV. Blackadar; and finally to the excellent working spirit shown by the students, which proved an inspiration to those who directed the classes.

There was a suggestion made in regard to the future work of the schooll,-that students as far as possible avoid too many subjects and devote their energies to one or two.

The next meeting will be held in Cape Breton if suitable arrangements can be made as to place.

The total enrolment of the school at Yarmonth was abont Izo.

While travelling on the steamer that runs between Revelstoke and Nelson, B. C., the captain told the following story: A Cockney who had recently arrived in Canada was complaining of the way in which the King's English is mutilated in this country. "Why what do you think I 'eard the other day at a railway station when a train stopped? A man put his bare ead out of the car window and said, 'where ann I at?" "
"Well, what should he have said?" said a standerby.
"What should he 'ave said?" said the Cockney, disgusted: "Why, 'where is my "at.' of course!"

A subscriber who has lately removed to the west writes: "Although I am teaching in the territories I feel as though I had lost a great friend when I don't get the Review."
I. H, F.

## Art in the Public Schools.

Hunter Boyd, Waweig, N. B.

## I. Its Function in Pedagogy.

In a series of questions published in Educational. Review of October, igoi, there was a sentence to this effect: "Show the bearing of this whole movement on the training of the emotions." In reply it may be said in brief that if the nobler emotions are not appealed to and refined and strengthened, "this whole movement" is only an occasion for munecessary expenditure of time and money on the part of our teachers. Of course we readily admit that illustrative material may be made more interesting if it is beautifully executed, and in the teaching of history, geography, and "common things," its aitl has been found invaluable, and we are grateful that the supply is now more almudant, and the cost greatly reduced. But its chief function is the imparting of information.

On the other hand there is a comparative dearth, in many schools, of material that appeals directly and strongly to the noblest enotions in the selolar:, that is, of reproductions of works of art that are truly beautiful, and at the same time suitable for school use. It is cheering to know there is a more widespread desire for its introduction, and the beat method of using it.

We shall best arrive at a solution of this problem by distinctly understanding the function of art in relation to pedagogy. Nearly all the subjects on the curriculum in the public schools are analytic in their tendency, and even poetry has not been exempterl from, the scientific process. The subjects are addressed to the intellects of the scholars, and it is not easy to develop enthusiasm in their study. Indeed botany is associated in many minds with hated technical words and long lists of Latin manes. It is true we do not really know a thing until we can name it, but it is surely a misfortune if the dissecting process obtains to such an extent that the emotions are quiescent. We need the synthetic element in our teaching also, and it is the fumetion of art to contribute to this. The intellectual processes are suffused by emotion and by the same emotions when art makes its presence felt in the sehoothornse. The emotions are not very active in a grammar lesson, nor in mathematical exercises, mines, it be the emotion of distaste, and mayle fear of disfarour forr wrong answers. lint let music be leard, or a leautiful picture introfluced, and the emotional mature of the scholars is wrought upon, and prolably in the
same way, and at the same time. Art brings in a unifying agent into the school atmosphere. Not all can enjoy the advantage of pianoforte music, nor secure the privilege of examining a real work of art, but more or less of musical drill, and some fairl: good reproduction of a good picture is practicable for a much larger number of teachers and scholars. But let it be clearly borne in mind that a new source of pleasure is to be introduced or angmented where it already exists. We earnestly trust that a greater burden will not be placed on the little memories and antipathies engendered where they do not at present exist. For some persons joetry was robbed of all possible pleasure-giving because scholars were required to analyse and analyse persistently. In addition to particulars concerning the author, and circumstances relating to the composition of the poen, archaic forms have to be explained, and "poetic license" accounted for. But we are pleading not for the insertion of a new topic, so much as the introduction of a new influence to pervade the atmosphere of the schoolroom.

Cethe in "Wihhelm Meister," has said: "Men are so inclined to content themselves with what is commonest : the spirit and the senses so casily grow dead to the impression of the beatiful and perfect, that every one should study, by all methods, to nourish in his mind the faculty of feeling these things. Fior no man can bear to be entirely deprived of such enjoyments: it is only because they are not used to taste of what is excellent that the generality of people take delight in silly and insipid things, provikled they be new. For this reason one ought every day at least to hear a little song, read a grood prom, see a fine picture, and if it were possible, to speak a few reatsonable words."

## 1h. Tile Cinolee of Materim.

Doulbtless by this time most teachers are of the (p)imion that it is well to make use of pictures in the schoolroom. Not a few in the provinces are in possession of a large assortment of material, and in many instances on taking charge of a new school one of the first duties is to attend to the decoration of the walls. Lut there are those who reatily confess that their acquaintance with art is very limited, and they have been governed in their choice of subjects manly be size and cost of reproductions. They have mot been working according to any particular plan in their selection, as for instance, "animal painters" as Edwin Landseer or Sidney Cooper, or Rosa Ronheur. Neither to they propose to make their scholars acouainted with the work of any particular school
of artists, $\varepsilon$. $g$., the Barbizon school; but rather that they thought this or that picture was "pretty," "nice," or "cute." Indeed they were not aware of any particular motive except to relieve the monotony of the schoolhouse, or furnish something for the scholars to "write an essay upon." There is little fanlt if any to be found with this state of things, and much for which to be grateful. Possibly in some instances if one were to enquire for reasons the statement would be made that very little was heard at normal school about the esthetic movement and its principles. At any rate a growing desire is evident for some guidance in this matter, and the progressive teacher is left with two alternatives, either to devise an original plan, and slowly gain experience, or apply for English or American publications which deal with this comparatively new but important branch of pedagogy. Those who follow the first plan would probably like to compare notes with others who are making headway in the same department, and those who rely upon the second method are most eager that definite instruction should be given to the students who are passing through our normal schools. Possibly all would welcome a means of communication in the columns of the Review. A list of books suitable for the needs and the income of the average teacher would be welcome and the names of publishers of productions, others than the admirable and inexpensive Perry and Brown series, would be acceptable. In the states of Massachusetts and Connecticut the directors of art have suggested lists of piotures suited to the varions grades, and a further classification is made according to the seasons or notable days of the year. But it is felt by some that a point of contact should be found for Canadian educators: and an "Art for Sehools Movement" for these provinces, or for the dominion, would soon make it worth while for a publisher to issue a series of pictures after Canadian artists, or at any rate some uniformity of choice of themes may prevail in our schools. In this connection attention may be directed to the "H. B." set issuted by an American firm.* Many of the series are in colour and the set of twenty-five can be had for less than half price by our teachers.

## III. Tiie Metioon.

The method of using such piotures can be better dealt with when a specific case is mentioned, but meantime in answer to the enquiry, "How would you begin to explain a picture?" We would say. "Take Punclis advice, 'Don't.'" Give the artist.
the picture, the scholars the first chance. When the surface meaning is exhausted and questions arise about details in the picture, stimulate discussion, and only when interest is awake proceed to explain. We respectfully solicit experience in this department, and shall be glad to give any information about the more commonly known pictures if such is not readily accessible by other means.
"God uses us to help each other, so Lending our minds out."
*Royal Picture Gallery Company, 152 and 158 Lake street, Chicago, Ill.

## How Nature Study Should be Taught.

Begin every lesson by showing either a specimen or an experiment, or by asking a question about some observed phenomenon.

Direct pupils to observe nature whenever they are out of the house.

Have pupils keep note-books of every feature of the progress of the seasons.

Direct pupils to collect such specimens as are needed, telling them just how, where, and what to get.

Watch the markets, and make use of the material they bring within range.

Have pupils describe and name an object and describe its parts, before you teach them its functions, habits, ete. This is "the study of structure before that of functions."

Never tell pupils anything that reasonable effort can lead them to learn for themselves. They become "docrs by doing."

Commend all voluntary observations and individual studies on the part of a pupil.

Do not make the lessons so elementary as to make thinking unnecessary on the pupil's part, and do not permit them to degenerate into mere object lessons.

If there is a good prescribed course available, follow it with care: but if not, use any material obtainable, remembering that the aim is culture, not instruction.

In order to teach yourself more about the subject, do not hesitate to ask questions, by correspondence or otherwise. Remember it is not essential that the instructor should learn all his facts by the observational method which he asks his pupils to adopt.

Review the subject in a good summer school of the right kind, where both profit and recreation may be obtained.-Dr. Edzuard F. Bigelowe, Stamford, Ct,

## The Spirit of Helpfulness.

Address of G. U. Hay to the Graduating Class St. Stephen, N. B., High School, June 30.
I need not remind you that though your school life is ended today your education is by no means complete. Tomorrow you will feel a certain freedom, a feeling that there are no more school lessons to learn. Your time will in a certain measure be your own, your energy and industry will be directed into new channels; yon will come more in contact with the world, and you will begin to realize what kind of a schoolmaster is this world in which we live. Some find it a very hard school indeed. I trust it may not be so to yon. The kind of postgraduate education you are likely to get from it will depend in a large nieasure upon yourselves. If you are always willing to learn the best that this world has to teach you, and will cultivate the qualities of self control, self-reliance, unselfishness, obedience and cheerfulness there is no doubt you will get along very well in the world's attempt to educate you.

I would like this afternoon to adklress a few words to you on possibilities after graduation and the doors that are open to graduates. Now, the great majority of those who leave school have to be content with the lot of "average citizens," and a very happy lot it is if you young people are trained to fill it with industry, earnestness and faith. I know of no happier lot in this world than to find some congenial occupation and to work at it earnestly with brain, heart and hand, and to sweeten that toil by devoting a certain amount of your leisure time to the reading of good literature and the study of the features of the natural world that lie so temptingly about us all thro' this Canada of ours. This is a beautiful world in which we live. It is our dhty as intelligent beings to learn something about it so that we may best enjoy it as we pass throngh, and make it the happy place that the Creator by his goodness and wisdom designed it to be-

You have read in your history of England that King Alfred so divided his time that a third should be devoted to work, another third to reading, study and recreation, and the remaining third to rest and devotion. A third of a day to study, recreation and reading! How the busy man of affairs laughs at such a waste of time! and yet he may be dwarfed intellectually and in spirit by the lack of this much neeted leisure. I met a New Lrunswicker recently in a thriving city of the west. He had built up a fortune in less than a score of years. But had you seen and talkerl with him you would not have envied him his wealth. The race for money had apparently destroyed any. taste, if he ever had any, for the calmer and more rational enjoyments of life. Noney is a very good thing to have, if we have not too much of it, and if the strain and worry of getting it has not blunted the moral sense and dulled the desire for the higher intellectual life.

Canada is a new commtry and the energies of her people must be devoted for a time, as in other new
countries, to the making of a living and perhaps to the making of a reasonable amount of money. But my plea to you today is-do not allow the making of money in your future life to dwarf your intellects; to blunt your sensibilities of the beautiful in Nature, in Art and Literature. Above all do not lose sight of character. Conduct, says Arnold, is three-fourths of life. There are conditions in money making today on this continent that are neither honest nor wholesome. Money is often made for selfish ends without regard to the rights of individuals or of the public. Aggregations of money, of capital, are being made that are dangerous to communities and that aim to crush individual rights. And this is because men are too eager for money and power and have not the character to use these for the benefit of the public but only for their own selfish ends. How can we find a remedy for such a state of things? It must be in wiser education and conduct. No truer words have been said than those of President Eliot, of Harvard, that the aim of education is "to lift the whole population to a higher plane of intelligence, earnestncss and faith." The schools alone camnot do this. The world will have to do some teaching along this line, and less in the line of trusts, shams, and graft.

I have said that the majority of those who go out from our schools must be content with the lot of "average citizens." The minority of youthful citizens in our schools, those who are to become the governors, ministers, legislators, poets, philosophers, leaders of thought and industry, the men and women who plan work for others to do, may, with a little assistance, be left to work ont their own destinies. Such men and women have done so in the past. They will do so in the future in spite of disadvantages.

But there are some people who seem to have no object or purpose in life. Every little difficulty that arises seems to turn them aside. They like to go along the path that is easiest and where there is least resistance. Perhaps it may be that there is very little in some of these people; and as an old lady once sait in speaking of a friend, "You can't get more ont of people, my lear, than there is in them." It may be that many persons are shy and retiring and are pushed aside by those who have not half the ability, but who have more energy. Whatever the cause there are people who seem to be leading half-starved lives and do not seem to know it; some who have not discovered the divine gift that is within them. Some one has said what a change it would make in this world if each one understood his or her special gifts and went to work at once to cultivate and apply them for the benefit of himself and society.

Nuw we cannot imagine any boy in the graduating class before ths saying-"My work is now done. The work owes me a living. I will earn casy dollars -that is, I will get money with as little effort and with as little work as possible." Nor can we imagine any girl of this graduating class saying-
"There is no need of my doing anything. My father is wealthy. I can spend my mornings in reading the latest novel, my afternoons in lounging in a hammock or playing bridge-whist, and my evenings in going to parties."

Every self-respecting boy would scorn the thought of getting a dollar without earning it. Every girl of spirit would loathe the prospect of spending the mornings and evenings of the best of her life in idleness or in the gratification of self.
"But what is there for me to do?" some one may ask. "I do not have to make my own living. I have no aptitude for business. I do not wish to becone a teacher or enter any of the other professions." Well, let it be granted that you do not have to earn your own living; and that you have no necessity or inclination to become a teacher or doctor or go into business. Suppose you have no aptitude for anything in life from which you may draw a salary,-does it follow that those divine gifts within you are not to be cultivated and be made a blessing to yourself and to society? How can this be done?

The answer is: Every human soul should make the most of itself as a mark of simple gratitude to Him who created it. Every human being born into a community has obligations to the other members of that community. The education he receives, the privileges he enjoys in a well regulated town like this are not paid for by one houschold but by cvery household according to its ability to pay. If the one who is educated here in the many excellent schools that are freely provided and who enjoys other privileges moves to another country he preserves a lifelong attachment to his native place. One of the most gratifying things to me on my recent visit to the far west was to see so many people from the Naritime Provinces occupying prominent positions, and to note the attachment that all had for the place of their birth; quick at all times to speak well of it and to stand up bokdly for its good name if necessary. That is the true spirit of loyalty.

And not less is this spirit of loyalty and attachment shown by those who stay at home and help to build up their own town or communty and its institutions. Education, whether we receive it in the scloools or in the business or social life of the community or by communing with books and nature, has for its purpose the opening of a life of activity and usefulness for each one of us. That life in its fulness and what it accomplishes for ourselves and the world around us means very much. It means that we shall keep our bodies healthy, pure and wholesome: it means that the intellect shall be clear. infuiring and receptive: it means that the spirit shall be strong, human and full of sympathy for others. Ilow large is this (iond-given human nature of ours, and how full of promise it is for those who strive to think and to accomplish! Not one of its manys sides may be neglecterl. The man who devotes his life solely to the naking of money may starve his soul. Herbert Spencer says-"The performance
of every function is in a sense a moral obligation.;
Let me in a few words try to show how we may use this body, mind and spirit of ours so that they may be of the greatest service to ourselves and to others.

First, as to the body,-it must be kept in good health, if the senses are to remain alert and keen. Every wholesome exercise of the body invigorates the spirit; curling, snow-shoeing, skating and hockey in the winter; walking, camping out in the woods, rowing, and all healthy outdoor games in the summer. But don't be satisfied with playing ball or hockey by proxy-don't sit down and cheer and eat candy and peanuts while others play the game. If you have to go a mile or two don't take the street cars (I hope none of you are financially interested in the street railway), but walk and enjoy the wholesome exercise, the pure air, the wayside flowers and the joyous songs of birds in the trees. The objection I have to antomobiles (I may tell you in confidence that I haven't money to buy one), to street cars, and the vans that carry children to school is that the good old-fashioned habit of walking is in danger of becoming a lost art; and people are missing the exhilaration that comes from a good bracing walk in the open air.

Why do I lay such stress on this bodily exercise and what advantage is it to the whole community that you should have sound bodies? Because if you are healtly and aim to keep healthy, your senses will be alert and keen, you will look well after your own business and the business and other interests of the town that may hereafter be entrusted to you; your intellects will be sharpened by wholesome physical exercise and you will delight in good wholesome literature instead of weak novels and thus add something to the culture of the community. And there is another fact that should have weight: Every intelligent stranger who comes to your towa will notice beautiful houses and grounds, fine horses and carriages; but what will impress him most will be the alertness and physical health of the men and youth whom he meets on the streets and the poise of figure and clear complexions of the women. A healthy town with healthy people in it has a reputation that is worth preserving.

And now a few thoughts about the training of the mind. Have you ever considered how the mind acts 1 ppon the body. Every act of the body is thought over in the mind beforehand either deliberately or quickly. If you pitch a ball there is a mental image of the curve it will make and where it is going to light. If you go on a journey there is picture in your mind how yon will go, what you will do and what yon will see. And so it is with every bodily act that we are conscions of. It is preceded by a mental image of the act. Thus the body is the servant of the mind. How important it is then that the mind slaall be carefully trained. Hitherto your mental as well as your moral and physical training have been directed in the home and school. From this time forward your education will be more in
your own hands. Now if you have tried to do your best in the school and home you have one good habit pretty well formed, and that is the power of sustained effort,-the habit of doing the best thing not only once or twice but to keep on doing it through life, and doing it with accuracy and thoroughness. If this habit is pretty well grounded the education that you will get from the world will be very considerable, for the world encourages trained workers and helps to bring out the qualities of the keen enquiring and receptive mind.

There is one point that I have referred to before and which I must not lose sight of, and it is this: That those who engage in business or a trade or a profession, or those who may be above the necessity of earning a salary owe it as a duty to themselves and the commminty to cultivate their minds for their own benefit and for the benefit of the public. Many of you-all of you, I hope-have a taste for literature. What an excellent thing it would be in your post-graduate course in the world's school to form a reading club, and gather in with you sone of the graduates of past years to continue the study of literature begun in your school course, or if this is not possible let two or three join together and with the assistance of a reader or scholar of some experience plan out a daily course of study in the poets and prose writers of "English literature. And do not be too modern in your choice of authors. Let one or more of the following writers be on your list: Chancer, Spenser, Shakespeare, Addison, as well as Wordsworth, Browning. Tennyson, Longfellow, Thackeray, Scott, Dickens, and others that might be named. If you read novels tet Scott and Dickens be your first choice and to not be in a hurry to read the stories written in recent years. Many are worthless. It is a pleasure to know that there never was a greater demand than during the past year for reprints of the works of Shakespeare, Scott and Dickens. These have stoxel the test of years and are certainly deserving of more attention than those of late writers.

If yon have a love for mature yon can do much by the study of your surroundings to occupy rour minds profitably and give benefit to others. What is needed in New Prunswick, as it is needed in other provinces of Canada, is a systematic study of our plants, birds, insects and other anmels; onir forests. and streams with their proslucts; our climate, soils and minerals. Much can le dome by the students trained in our schorls to make better known to the world our resources. What more inviting study than that of our birds who wor you from tree top and meadow with their charming melorlies. A smail opera glass or fiek glass and a lowe on birds with : little enthusiasm and considerabo patience will make you acomainted with the differences and hathits of the birds who frepuent our wrods and fieds in summer. The many different kinds of plants that inhabit onr worts, meadows and mors lave a womderful beaty and structure, and still more wonderful are the liabits of many of them. Then at night

When darkness shrouds the earth, when bird and insect and blossom are resting, there are the stars that come out above you and invite you to study then. You have noticed that one star differs from another in brightness. Have you learned to distinguish the difference in color of the principal stars? Have you thought why one is red, another blue, another yellow, another white? Have you learned the names of and been able to trace the constellations in their course through the sky? If not, these and a hundred other problems will fasten your gaze and fascinate you as you look upward night after night.

There is so much to delight and instruct you in the study of nature, that once you are interested it will become a life long pleasure, and be a pleasure to those around you, for enthusiasm is contagions. Getting ont of doors as much as possible, and being interested in things out of doors will keep, you perpetually young in spirit at least, especially if you can spend a month or two in summer in the conntry or in camping out. The novelty that comes from roughing it in the wilderness, the exhilaration that springs from making one"s way up and down some of New Brunswick's rapicl rivers in a canoe, or camping ont on the shores of sonme of our picturescine lakes, or of going through great stretches of forest, or climhing menutains, not only give health and pleasure at the time,-the remembrance of them will call up a feeling of delight in after life and cause the blood to move more swiftly through the veins. It is a healthful and joyous recreation, and when it can be combined with some study of nature it helps to benefit the world as well as yourselves. This getting nearer to mature and studying her many forms will help us to a more wholesome way of living; it will refresh and renew the spirit.

Thave spoken of the care of the body and the cultivation of the mind. How necessary these are to our happiness and the happiness of others! Then there is the spirit which animates body and mind. IV e should seek to cultivate the spirit. There is the spirit of thankfulness to 1 lim who has created this beatuiful word and would teath us how to enjos it rationally. There is the spirit of helpfulness. Cultivate that. If you enjoy the book you are reading go and read it to some invalid or lend it to some me who has not had the same advantages that you have had. If you take delight in your "literature class" call in sthers to share that ielight. If you have found a rare plant in your walk: or if the somgsparrow, or purple finch, or thrush, have poured out mote more joyons than usual, make everyme in your neighborhond have seecing eyes and hearing ears. Son will have many mpmotunties in your lives to cultivate the spirit of helpfulness and it can le done by a therongh sympathy with and comsideration for the life and surfmatings of others.

Youmay be assured that sen lives will be happey -and we all desire happiness-if you fail not to "keep uy your spirits:"-the spirit if thankfuntes. the spirit of helpfulness, of cheerfulness, of forbear-
ance, the spirit of giving up your own pleasure for that of others, the heroic spirit that will carry you through life without flinehing under trial.

Now I am afraid this brief address has not made clear the doors that are open to you after graduation, or has not given you much advice about the particular occupations you may follow. I did not intend to do that, but rather to point out what may claim your attention outside of your occupation, and how you may make a good use of your leisure time.

## Address of F. B. Meagher, M. A.

To the Graduating Class of the Woodstock, N. B., High Sehool, June 28th.
I esteem it both a pleasure and a privilege to be called upon to address you this evening, but regret that some one has not been selected whose language would give expression to thoughts lofty and worthy of remembrance-some one whose eloquence would do justice to an occasion which is not only a landmark in your educational progress, but in your lives as well, for your school days are now over, and in a certain limited sense, you are about to go forth into the world. Perhaps the happiest days of your lives have been spent. Other happy days you will see but into them will enter the cares and responsibilities of life, and then you will realize the full force of that oft repeated quotation from Virgil's Fneid, "Forsan et haec olim meminisse juvabit," for their memory eannot fade away. Your school days are over, but in a wider sense you have not severed your connection with this sehool. You will have a kindly place for it in your thoughts and be loyal to its interests; you will thave a friendly regard for other graduating classes for old times' sake; and you will always gratefully remember those teachers inder whose patient and efficient care you have been trained and fitted in a measure for the work of life.

Some years ago (how many I would not like to say) a class graduated from a well known high school. They had no strch fitting and appropriate exercises as youl have here this evening, but instead were subjected to the dread ordeal of a public examination. Sonne acpuitted themselves brilliantly, some indifferently, and with others again it was clearly a case of "rox faucibus haesit," for they could answer no questions at all, but these were minor incidents, and were soon forgotten in the glad feeling of relief which came when it was all over. Now for one long last look at the old familiar rooms which they would never again enter as pupils, then good-bye all aromed, and they are away. The members of that class, and it was a large one, are now scattered far and wide, distance and lapse of time may have caused their school-day friendship to grow cold, but neither the one nor the other can break that tie which still binds them to the old high sehool of happy memory which they all attended together and where they were taught by one whose fame is now spread over the English speaking world. Nany of them have done well in life. Some
are pursuing the even tenor of their way unburdened by the weight of ambition, and some, alas, have joined the great majority. Of those who entered college a few won a high place in the roll of their Alma Mater, and not a few who went forth resolved to do so had their hopes come to an untimely end in the first written examination, and they who worked faithfully on undaunted by failures deserve more mention here, but lack of time forbids.

This is the history in brief of that class and I have instanced it because in a way it is a type of all classes. Your hopes and aspirations are no doubt the same as theirs; your friendshp may be more firmly cemented by mutual intercourse or it too may grow cold in the lapse of years, but it can never die, for the same common tie will still bind you all together; you too will win honors, and you also will meet the reverses which must be bravely borne, for in this will lie the true test of your worth. The triumph of success is a great thing, but the triumph over failure is a better and greater, and they who can keep steadily on in the face of repeated failures, until they attain the goal of their ambition are most worthy of imitation, for they have been trained in that great school of strong and patient endeavor which upbuilds character and makes earnest and self-reliant men and women. They shall bear the palm for they are worthy of it as your class motto implies.

In conclusion I wish to congratulate you on so successfully completing your high school course, and extend to you my best wishes for your future welfare and prosperity.-Woodstock Dispatch.

## Letter Writing.

The exercise in letter-writing given in language books are often stilted and unnatural and require a ehild to express, instead of his own thoughts, those of a person in some other situation or condition, often quite foreign to his experience. Natural and casy letters will result when the children are at home with their subject.

In a class of over forty, some one is nearly always absent on account of illness. We ahways write to these pupils. We tell then every bit of pleasant school news that we can remember, about lessons, visitors, exarminations, attendance, and any little event of the day. That they may not be too monotonous reading, each writer adds a bit of his own personal experience or adventure. Then a proud boy is sclected as mail carrier.

There are several ethical lessons connected with this exercise: We must always send kind messages, be thoughtful for sick people, and not mention unpleasant things : we must remember that our mail carrier should be too honorable to even glance at the letters entrusted to him. Loyalty and sympathy are also developed in this way.

## The Review's Question Box.

G. H. H.-Would it not be well for teachers to invest ten cents a year in the reports of the Geographic Boarll of Canada and spell place names uniformly?

A correspondent writes: "It has occurred to me that you would have printed the name of the author had you known that the song beginning "It is Only a Small Bit of Bunting" (page 304, Educational Review for May) was written by Mr. J. C. Morgan, M. A., inspector of public schools for the North Riding of Simcoe and the town of Orillia, Ontario.
M.-I am troubled with tadiness. Is there anj care for it:

Do not be too much troubled about it. There are other things worse than tardiness. I was with a superintendent recently when a teacher came to him to complain of the annoyance caused by tardy pupils. He told the teacher that it was wrong to be too much disturbed about it; that tardiness was not a $\sin$; oftener it was a virtue. Thirk about this. The school above referred to was in the poorer parts of a large city, and the superintendent folt the teacher should discriminate between the boy or girl who had to be late in order to earn a few pennies to eke out the family income or to assist a tired sick mother, and the child who was habitually and carelessly late.

No, do not worry about tardiness; try all you can to overcome it. Make the first fifteen minutes the most interesting of the day. To pupils carelessly late deny the privilege of taking part in these exercises, and let them sit apart from the others. Don't pay much attention to them. When they see what they are missing-the most pleasant exercise of the school-they will come in time, if is possible.

In the face of the almost manimons opposition of the teachers, the New York Education Committee has determined upon the abolition of corporal pumishment. The power of expulsion is, however, to be vested in the hands of the principal teacher. The change can hardly be looked upon as one for the better. Although improper or frequent use of the cane cannot be tor severely condemned, it is certain that a good thrashing does a boy who deserves it far less moral injury, than would be infficted upon him by the disgrace attendant upon his expulsion from school.-Exchange.

O ye! who teach the ingenious youth of mations.
Holland, Prance, England, Germany or Spain,
I pray ye floy them upon occasions,
It mends their morals. never mind the pain.
-Byron (slightly altered).

## The First Day of School.

The first day of all days is the crucial test especially for the inexperienced teacher. All her theories acquired in normal schools may avail little if she lacks the ability to put her own heart thoroughly in touch with the sonls of the little ones before her; and the children before her are invariably "so mulike those in the practice classes!"

During the first day every act, from the greatest to the least, is of vital importance and significance. The position in which she finds herself placed calls for the most painstaking preparation, not only for special work in the classes, but for the general work of the school. Any sign of weakness or indecision in this day's programme is detrimental, nay, disastrous.

In the higher grades real work can begin at once, but in the intermediate and lowest grades a day or two can wisely be taken for talks, songs, entertainment and "getting acruainted."

Do not find fault with the work of the teacher who preceded you. Remember there has been a long summer vacation and it is not strange the children should forget. Do not expect to accomplish the perfect organization of your school the first day or the first week. If it be done at the end of the first month yon will have accomplished much.

Suggestions for a first day programme may be of some value. The pencil and paper on each desk is previously placed. On these slips the children should write their names, their row and the number of their seat. The old practice of going up and down aisles taking the names of pupils is unwise, for many a teacher has lost the control of her school by the vain attempt to keep the children in order while doing thins. The slips are passed forward and in three minutes you lave the names of fifty children.
l'reviously written by yourself upon the blackboard is the appropriate memory gem which serves for a talk and is memorized; for yon are wise enough to select not more than two lines, but those two lines are full of meaning, and you have one or two bright little anecdotes to tell about the thought.

Even if yon plan the work for various classes, there will be sure to be much extra time. Your general preparation fills just such moments.

You know some poem which is appropriate to the season. Tell the children it is better to begin learning it today than to put it off until next week, so you perhaps teach them Henry Van Dye's little poem:

These are the things I prize And hold of dearest worth; Light of the sapphire skies, Peace of the silent hills, Shelter of forests, comfort of the grass, Music of birds, murmur of little rills, Shadow of clouds that swiftly pass, And, after showers, The smell of flowers, And of the good brown earthAnd best of all along the way, friendship and mirth.

At another convenient place in the programme you are prepared to tell them some interesting fact in nature. Best of all is the short story which you have prepared. You do not read it. You tell it and "to be a good story-teller is to be a king among children," so establish this coveted kingship on the very first day. The story should be one of the choicest and best you know. If possible, illustrate that good story on the blackboard.

Then let the children sing. They will be delighted to sing to you their favorites. As each song ;s finished, say something pleasant to them about the song or about their singing. Tell them you like it, that they sang it well, that it is a pretty song, who wrote it and what it means. Above all, find no fault with any harsh tones or too loud voices,-only make a mental note of these. They can be rectified later in the school work. Let the children sing on, song after song, if they all wish it.

The gymmastics and marching will be usually enjoyable if, in addition to the usual movements, you can show them other and new motions.

The drawing lesson, always enjoyed, should, if possible, have a place in the first day's programme. Carefully prepare some design which you will first draw, then colour, at the blackboard, while the children watch you. If uncertain of your ability, practice upon it several days before sehool opens. Your design should be very simple but effective. It may be but a stubby little twig with an apple and three green laves clinging to it, but the chithen are led to see that the red colour in your apple exactly matches the red in that real apple on your deskfor of course there is one like it on ymir desk-ann the green of your leaves is like the real green leaf on your desk. The children see that youl hatl a plan and that you accomplished it directly and successfully.

Distribute papers anted let them try to do the same with pencil outlining, ink and brush work, or water colors.

Plan to speak of some current wemt that is af
present interest to the whole country. Inform yourself about it ; simplify the facts and tell them to the children in simple language.

In all that you plan to have the children do this first day, aim to have the work such that, while not easy, it can at least be done by all and well done. Tact in asking questions, assigning board work, reading or seat work, is required. A child dreads to fail outright the first day of all days. He is more disheartened than at other times.

A good teacher is a gift direct from God just as surely as is a good poet or artist; and looking back upon our own education we can trace our best work, our noblest aspirations, our very character, to the influence of one true and noble man or woman, and not to any one text-book or any particular study.

As the last child leaves the room at the close of the first day, and you sit in silence before the eimpty seats and think of the day, you will naturally ask, "What have I accomplished today?" Little in any text-book, perhaps, but you have gained and kept their attention, you have won obedience, promptness, accuracy; you have gained kindness, order, interest, and, best of all, most treasured of all, their love.

Is not this a good begiming?-Adapted from Popular Educator.

## The Beginning of a Western Town.

A correspondent writing from Rosenroll, Alberta, gives a suggestive sketch of the rise of a western town. The letter is dated about the first of May. By this time it has probably doubled in population and buildings. She says:
"Camrose, our new town, expects to be a railway terminus this fall. It was laid out last September. Lots sold at good rates from the first, but some that were sold for $\$ 200$ last fall have had $\$ 500$ refused for them since. Two churches are occupied and two others are being built. Nlodest little structures they are, but they form the centre of considerable of the life of the surrounding country. The two licensed hotels tell the story of another kind of life. Most of the two dozen and more buildings are business places.
"Camrose has a good site on a pretty slope rising from Stoney Creck. For awhile there was anxiety about the water supply butt several good wells have lately been bored. W'ater was obtained at 8 or 90 feet.
"In the December Review in speaking of the govermment suppert given to schcols, there was an cror. The amotnt received from the central government until late years was seventy per cent. of the district's expenses. This has been somewat reduced. The money is paid on a different basis. Quite a large proportion of the grant depends on average atteidance. equipment, etc. This is an incentive to provide good buildings, fences and apparatus."
B. E. D.

## Teachers' Institute.

The twenty-sixth annual meeting of the Amapolis and Digby Counties Teachers' Institute was held at Digby, Nay 26 and 27. There were representatives present from other counties adjoining inchuding Inspector MacIntosh and Principal McKittrick of Lunenburg, and I'rincipal Morton of Bridgewaterd The excellence of the papers and discussions were quite equal to those of recent years. To the president, Inspector Morse, belongs muel of the credit of the success of these amnual meetings. The first paper was read by Principal Morton of Digby Academy, on The Three R's. In reading greater variety of readers is necessary; spelling should be taught from the context; in arithmetic accuracy is the test. This excellent paper gave rise to an animated discussion in which Principal Smith, Principal Morton of Bridgewater, and Miss Kinley took part. Miss Hattie M1. Clark gave an instructive talk on Drawing. In a miscellaneous school she woukd make two divisions of this subject; the first, inclucling the lower grades, to deal with outline work only, while the second, composed of the higher grades, should add shading. Principal A. W. L. Smith of Annapolis, read a paper prepared by T. H. Spinney, in which a method of reducing the vulgar fraction to the decimal form differing from that in the text book was introduced and received demonstration upon the board at the hands of the reader. Miss Mary T. Kinley read a suggestive paper on The Country School; its Discouragements and Inspirations, which was discussed by Dr. J. B. Hall, Mr. A. DeW. Foster and Miss Mabelle Jiash.

In the absence of Professor Haley, of Wolfville. Dr. Hall addressed the institute on the elements which enter into the training of pupils, and gave some very practical and usefur suggestions on the course of study, the pupils' surroundings and the teacher. Miss A. B. Juniper, teacher of domestic science at the Middleton Consolidated School, gave an excellent address on this subject and its bearing in education. To many domestic science means instruction in cooking only, but such a meaning is very restricted. It is a training wheh is of incaleulable benefit in teaching girls to kecp, grod lomes and become intelligent mothers.

After an address by Mr. (i. A. Hoate om the drawing of projections, the institute apprinted relegates to the Provincial Educational Xssexiation-and named the executive committee for the ensuing year.

At the final session Mr. W. K゙. 'Tibert, of Bear River, gave a lesson on elementary science to a class of grades seven and eight, which carned the welldeserved commendation of the institute.
"The Rewnew helps me very much in my work. It is always to be fonul on our selow reading talake and the prupils enjoy it with 1s."
E. (i. 1).

## A Country Newsboy

People who travel on railway trains frepuently notice dogs rush out from farm houses and try their speed in a race with the "iron horse." Such dogs, if properly trained, might be as useful as the case mentioned in the following, which is taken from the paper called Our Dumb Auimals:

The railroad ran along one side of a beautiful valley in the central part of the great state of New York. I stood at the rear end of the train, looking out of the door, when the engineer gave two short, sharp blasts of the steam whistle. The conductor, who had been reading a newspaper in a seat near me, arose and, tonching my shoulder, asked me if 1 wanted to see a "real country newsboy." I, or course, answered "Yes." So we stepped out on the platform of the car.

The conductor had folded up his paper in a tight roll, which he held in his right hand, while he stoond on the lower step of the car, holding on by his left.

I saw him begin to wave the paper just as le swong around a curve in the track, and a neat farmhotse came in view. 'way off aeross some open fields.

Suddenly the conductor flung the paper off toward the fence by the side of the railroad, and I saw a black, slaggy form leap over the fence from the meadow beyond it and alight just where the new:paper, after bouncing along on the grass, had fallen beside a tall mullein stalk in the angle of the fence.

It was a big black dog. Ite stood beside the paper, wagging his tail and watching us as the train moved swiftly away from him, when he snatched the paper from the ground in his teeth and, leaping over the fence again, away he went across the fields toward the farmhonse.

When we last saw him he was a mere black speek. moving over the meadows, and the train rushed through a deep cleft in the hillside and the whole seene passed from our view.
"What will he do with the paper?" I asked of the tall young conductor by my side.
"Carry' it th the folks at the honse," he answerent.
"1s that your home?" I inguired.
"Yes," he responded: "my father lives there ant I send him an afternoon paper ly Carlo every day in the way yon have seen."
"Then they always send the deg when it is time for your train to pass?"
"No," said he, "they never send him. "Ife knows when it is train time and comes over here to mest it of his own accord, rain or shime, smmath or winter."

- "But does not Carlo go to the wrong train sometimes?" I asked with considerable curiosity.
"Never, sir. He pays no attention to any train but this."
"How can a dog tell what time it is, so as to know when to go to meet the train?" I asked again.

That is more than I can tell," answered the conductor; "but he is always there, and the engineer whistles to eall my attention, for fear I should not get out on the platform till we have passed Carlo."
"So Carlo keeps watch on the time better than the conductor himself," I remarked, "for the dog does not need to be reminded."

The conductor laughed, and I wondered, as he walked away, who of your friends would be as faithful and watehful all the year 'round as Carlo, who never missed the train, though he could not "tell the time by the elock."

## The Joy of Hard Work.

Give your scholars hard work and encoutrage them to do it. Even the dull ones will catch something of the enthusiasm and bravely make an effort to win your approval. Never set hopelsss tasks but gradually lead up to harder and harder work as the year advances. One of the best ways to teach pupils to think quickly is the simple drill in mental arithmetic two or three times daily, calling on one and another for the answer rather than having them give it in concert. There is nothing so apt to clear the cobwebs from the childish brains as a quick test in adding or subtracting and the boys and girls really love the brisk work.

Five minute lessons on tablet or blackboard in geography are much enjoyed too. Have each pupil write capital and largest city at the top of two columns and then rapidly read the names of countries to them. Give ample time to write each word carefully and correctly but none to look about them io see what others are doing. In this way a large number of children can be at the board at onee and most children enjoy putting their work where all can see.

There is really no end to the mental stimulants that may be given if one is alive to the pleasure to be derived from hard work. "Work while you work," is the only motto for the sehoolrom. A young girl told me that once her teacher handed her a problem with the remark, "Here is one you may try but you won't get it. I worked a week on it myself before I solved it." She barely took time to eat and
sleep and at the end of four days was ready with a faultless solution. That lesson helped her all through life and still inspires her in the face of almost unsurmountable difficulties.-Selected from the Educational Gazette.

## The Battle Hymn of the Reformation.

The world knows Martin Luther as a reformer; comparatively few know him as a musician and hymnologist, writes Allan Sutherland in the August Delincator.. Luther wrote some thirty-seven hymns and Psalm revisions, and these have been translated into many languages. His masterpiece, however, was "A Mighty Fortress is Our God," the great battle-hymn of the Reformation, which is as dear to the German heart as the Fatherland itself, each being inseparably associated with the other. It is said that this hymn accomplished as much for the Reformation as did the translation of the Bible. D'Aubigne says that "it was sung in all the churches of Saxony, and its energetic strains often revived and inspirited the most dejected hearts." It was sung at Luther's funeral, and its first line is carved on his tomb. It was first published about I527, and has been translated at least eighty times, doubtless the most accurate being the version of Thomas Carlyle. That of Dr. Frederick Henry Hedge, beginning "A mighty fortress is our God," is the most popular in use in this country. Kostlin has well written: "This hymn is Luther in song. It is pitched in the very key of the man-rugged and majestic, trustful in God, and confident, speaking out to the powers of the earth and under the earth, an allconquering conviction of divine vocation and empowerment." The world has many sacred songs of exquisite tenderness and unalterable trust, but this one of Luther's is matchless in its warlike tone, its rugged strength, and its inspiring ring.

An English newspaper says that a schoolmaster was in the habit of punishing scholars who came late to school in the morning by keeping them in in the afternoon. One who was five mimutes late was kept in ten minutes, and so on in proportion. One morning it chanced that the schoolmaster was half an hour late, and a smart boy among his pupils was not slow to remind him of the fact. "I'm very sorry for being late boys," said the schoomaster, with a twinkle in his eye: "and, as I punish you, it's only fair that you in turn should me; so you will all stay and keep me in for an hour this afternoon."

## Selected Paragraphs,

The Japanese are serious-minded people, as their literary habits show. The recent report of the librarian of the imperial library at Tokyo shows that there is little demand for light literature in that capital, for fiction of any sort, contrary to the experience of most of the popular libraries in England, France and America. The Japanese mind runs to sciẹnce, mathematics, medicine, language, and to what may be termed the graver forms of literature. More than 40 per cent. of the works taken out of the imperial library are of this character. The Japanese are very fond of history, in the making of which they are extensively engaged at present in the eastern war.-Philadelphia Ledger.

In a city of 4.000 inhabitants in the middle west, in May, the school board raised the salary of the superintendent and of all but two teachers. Why. the exception of the two? They had no faith that the raise would be granted, and would not sign a petition to the board. All who asked received. Imagine the consternation of the neglected. They argued that if the salaries were to be raisexl all would share in it, and they shirked. There are a lot of shirkers just now in this matter of professional promotion. There are thousands of teachers in this country, literally, who are receiving an increase in salary who have not lifted a finger, not even a faithless prayer for it. It is refreshing to know of one town in which the school board took their inactivity at par.-N. E. Journal of Education.

A school teacher dreamed that she quit teaching and bought a farm. She felt happy in the prospect of freedom and profit. The first crop planted was wheat, and the yiek was large; again the teacher was happy. The total amounted to 7,000 bushels, and the market price was a dollar a bushel ; she sold it all and felt that now she could afford to do something she long had wished to do. But the wheat had been sold to 7.000 different people, a bushel to each one. A few of them paid cash but more did not, and many of them neglected to pay even when reminded. She was troubled, but awoke to find she was still a teacher. It required no Joseph to interpret the dream: she saw the point, gave heed to the printer and remitted promptly for her subscription. -The Western Teacher.

Marking time will kill a man much more quickly than marching at a quick step. In war times I remember to have seen a man tied to a tree and forced to mark time, with a guard over him to prod. He could mark time, as slowly as he pleased, but he had to keep at it. I thought the man would die. He could have marched twice as long without fatigue. The teacher who marks time is the one with nervous prostration. There is life and elasticity in progress. It is better for the blood, for the nerves, for the digestion to have something a-doing. It kills any one to teach the same this year that she did last. The one who has a perfect method, a perfect scheme of devices, is liable to break down early for lack of the elasticity of progress. Don't mark time.-N. E. Journal of Education.

Russia cannot win so long as Japan continues to exist. In that cluster of islands is to be seen, what has never before been recorded in history, nearly fifty millions of people, so perfectly united as to be fused by the fires of patriotism into a single individual, determined to die or to live as a free nation, and fighting as only such a mass of humanity, so inspired, can fight for such an end. They cannot be beaten, and no lover of humanity and freedom ought to desire it.-Chester Holcombe, in the July Atlantic.

Our schools are filling up with a spry, deft, alert. attentive, non-introspective generation of young people who will make agreeable neighbors and comfortable citizens, but they scem to be losing certain qualities of ruggedness that should distinguish a people. Our students are far too willing to take the teacher's word for it. There seems to be too little of that fixity of purpose and independence of attitude that leads one to say even of an unsclooled man that he has good stuff in him. As a body, our students ask few questions, they seldom challenge a classmate's statements, they are glad to be passed by in a recitation, to avoid interrogation. They like to bloom without being torn to pieces for analysis. They are not fond of knotty problems. There is little of that rejoicing in strength to run a scholarly race. I think parents make a mistake in not commending teachers more often for requiring students to work out questions for theme' es-G. B. Aiton, High School Inspector.

## A Use for Pictures,

My children always beg for "pictures" when we write compositions. I have cut pictures from old magazines, ete., using advertisements as well as others. Very often the children are proud to bring pictures they have cut out. I cut pictures of corn, melons, potatoes, tomatoes, pansies, sweet peas' etc., from a seed catalogue. These pictures I let some of the girls paste (one at the top) of each shect of paper) in a tablet, and when composition day dawns they are passed to the class.-Pop. Educator.

## CURRENT EVENTS.

The Canadian Pacific is planning to put on their road next year a fast train that will make the trip from Montreal to Vancouver in seventy-six hours, which is a little more than three-fourths of the time now required. It is also proposed to adopt electricity instead of steam in the operation of its trains in some parts of British Columbia, where good water powers are available.

A new great seal of Canarla has been received at Ottawa, bearing the effigy of King Edward instead of that of the late Queen. The old seal will be sent to the royal mint for defacement.

The King of Italy has given his award in respect to the new Anglo-Portuguese boundary in South Africa. The line will follow the Kwando river from the Zambesi to the twenty-fourth meridian east; thence rumning along the meridian as far as the thirteenth parallel of south latitude, and following that parallel until it reaches the frontier of the Congo Free State.

Lord Kitchener proposes the increase of the army in India to nearly double its present strength, as a necessary precatition against invasion; and the movement of forces nearer to the northwest frontier, as the point of greatest danger. It seems to be assunced that a Russian invasion is but a matter of time.
The first meeting of the Washington Conference, as it is called, for the arrangement of a treaty of peace between Japan and Russia, will be held at Portsmonth, N. H., early in August. The plenipotentaries of both nations are now in America.

It is reported that the Prince of Bulgaria will shortly proclaim himself king, and, if necessary, fight for the independence of his country, now under the suzerainty of Turkey.
The revolution in Norway has not ryet led to a disturbance of the peace. It is said that the throne has been offered to l'rince Karl, second son of the King of Demmark. If he ascends the throne, the youngest daughter of King Edward of Cireat Britain, who married 1'rince K゙arl in 18 g), will become Queen of Norway: while the Prineces Margaret, King Edward's niece, who has married the son of the

Crown Prince of Sweden, is now the prospective queen of Sweden.

Commander Peary has set out for Greenland, where he will establish a base of operations and pass the winter, preparatory to making another attempt next summer to reach the North Pole. His vessel, the Roosevelt, is especially built for the purpose, and is supposed to be the fastest and strongest ship that ever sailed for the Arctic regions.

Two rival expeditions have just started for the interior of Labrador, both from the United States. One is led by the widow of the luckless explorer who last year lost his life in the wilds, and the other by the friend who was with him and brought his body back to the coast after nearly perishing for want of food.

John Paul, the Scottish sea rover, who is known in United States history as John Paul Jones, and regarded as the founder of the United States navy, but who was in his later years an officer of the Russian navy until virtually dismissed from that service, is now demanding more attention and reverence than he ever received in his lifetime. His remains have been found in France, where they lay neglected with his death in 1792. They have been received with great honors by a representative of the United States government, sent to France for that purpose, and will be brought to America for burial in the grounds of the naval academy at Annapolis, Md. No one in his own day, least of all himself, probably, would have imagined that his memory would be thus honored by the country whose service he entered to shield himself from a charge of piracy, and abandoned for that of the Empress Catharine.

A new explosive is said to have been invented in France, consisting of ammonium nitrate and powdered aluminum, the gases from the explosion of which are harmless. It has the further merits of being safe from spontaneous decomposition or premature explosion by shock or friction, of burning only with difficulty, and of not being affected by frost or dampness.

Adrenalin, a powerful astringent discovered a few years ago by a Japanese chemist, and found useful in delicate surgery as a means of stopping the flow of blood, has hitherto been prepared only by a very costly method. It is now reported that it can be cheaply made from coal tar.

The Canadian government will set aside an area of ten townships for settlers from Great Britain, the land to be selected by an imperial commissioner and the colonists sent out under the auspices of the British government.

The bubonic plague is constantly increasing in violence in southern Asia. An official report just published shows that there were over a million deaths from it last year in India.

An astonishing incident has occurred in the Russian Black Sea fleet. For two weeks, the Prince Potemkin, the largest battleship of the squadron, was in the hands of mutineers. The other vessels
of the fleet were sent against her, but did not attack; and she was finally taken to a Roumanian port and surrendered, the Roumanian government later handing her over to the Russian authorities. It is a striking example of the (lissatisfaction and insul)ordination that prevail thronghont Russia, whieh the government seems unable to suppress, and the malcontents equally unable to turn into an organized revolution.

The Japanese have occupied the island of Sakhalin, which the Russians have held for the last thirty years or more as a part of Eastern Siberia. Creographically, it belongs to the Japanese archipelagn. It is said to contain valuable coal mines, and will provide Japan with perhaps the finest fishing ground in the world. The island is six hundred miles in length, with forest clad monntains in the interior, and a climate resembling that of our Labrador coast.

Several of the Russian ships sunk in Port Arthur have been raised by the Japanese, and it is thought that all or nearly all of the others will be affoat by the middle of August. They are less damaged than was expected.

Canada will assume control of the Halifax gatrison. September ist, and prolably the fortress at Esquimalt will be taken over on the same day. The imperial officers in charge will be transferred to Canala for the present.

## SCHOOL AND COLLEGE.

Principal W. H. Magee, Ph. D. (Cornell), has resigned the charge of the Parrsboro. N. S., schools and will be succeeded by Mr. J. Crerar MacDonalk, late principal of Baddeck Academy, C. B. 1)r. Wagee has been long connected with the higher educational work ui Xova Sontia, and his courses, especia:ly in chemistry and plysics, have been very successful, the result of the exceptionally excellent training he received. His successor, Mr. MacDonald, has a classical and scientific A license and has : good record of efficient teaching.

The first coloured girl stulent to graduate from the University oi New brunswick was Misa Margaret M. Wins:ow of Wooclsteck, N. B., who recently graduated it the head of her clas, taking homours in and wiming the Montgomery-Campbell medal for the ancient classices A good record.
Prof. S. M. Dixom, of Dathonsic L'miveraity, Halifax, has been appointed to the mewly created chair of civil engineering at Birmingham, England. I'rofenor Dixem ia graduate of Durllin University. He ncempied the chair of physice at the University of New brombwick and at Dalhousic with distinguished success, and had recently been appointed professor of eivil engineering at Dathonsic.
A. Stanley Mackenzie, Ph. D., a mative of Nova Scotia. a graduate of Dallonsie, and late profesent of physics in Bryn Mawr college, Pennsylvania, has been appointed th the chair of physice in Dallonsiz University. Profecs, Mackenzie was one of the most successful thlents trained by Dr. J. G. Macgregor and Profecone Clarles Machonall, and has had a year's work at Cambridge L'niversity in England.

Professor James Leichti, professor of modern languages in Dalhousic University, has been honored with the degree of LL. D. by Muhlenburg University of Pennsylvania, a Lutheran institution.
Mr. F. A. Dixon, A. M., for many years the principal of the Sackville high school, has resigned. At the closing exercises of the school his pupils presemed him with a handsome set of Kingsley's works, with warm expressions of their eiteem. Mr. Dixon has been succeeded by Mr. A. D. Jonah, vice-prineipal of the school, and $M_{r}$. Lloyd Dixon, A. B., ( Mit. Allison) has been appointed to Mr. Jonah's position. Mr. Dixon has donce efficient service and will be missed from the active educational work of the province. Mr. Jonah has been a careful student and a progressive and capable teacher.
Mr. Lawrence Colpitts, M. A., has resigned the principalship of the liuctonche school and will take an advanced course of study in Germany.-Sackrille Tribune.
E. M. Kicrstead, D. D., professor of English literature, logic anded psychology. in Acadia University, has been appointed to the chair of systematic thenogy and apologetié, in Me.Master University, Toronto, and has accepted the appointment. Dr. Kierstead is a native of Collinn, N. B., and a graduate of New Branswick University. He will be greatly misied at Acadia and from educational circles in the Maritime Provinces where his commanding abilities, brilliant scholarship, and power as a speaker have long been recognized and appreciated.
Profesio: 1. G. McKay, a native of Nova Scotia, has been appninted chancellor of MeMaster University, Turomto.
Miss Gertie Rosengren, teacher at Canobic, Gloucester Coun:y, N. B., with the help of her friends of that and neighburing places, has raised the sum of $\$ 63$, by means of an entertaiment held recently. The money will be expended in purchasing school apparatus.

Prolessor W. Y. Macoun. horticulturist at the Central Eaperimental Farm, Uttawa, has been appointed horticolturist at the Nacdonald Agricultural College at St. Smene near Montreal. Dr. F. C. llarrison, bacteriologist, and W. Loughead, professor of hiology and geology at the (inelph Experimental Farm have accepted similar positions at the Macdonald college.

I party of lady teachers of the W'innipeg public schools will spend the summer vacation touring in British Colmmbia and Alanka watera--Free l'ress.

Mr. Win. Whitney, who has been the capable instructor of the matmal training departments of the St. Stephen and Milltown schools, has resigned in orker to take a further course of etudy. He will be succeeded by Mr. G. A. Boate, a graduate of the Truro Manual 'lraining school, and Whose work in several Nowa Scotian towns has been very ereditable.

Among the graduate of Yale Unieresity this year were the following from the Maritime Provinces: Geo. W. Masion and 11. J. Melatehey, both of Fredericion, and araduates of the LY. N. li., received the degree of B. A.; E. C: Weymath, of Aphlayni, N. 13., took the degree of M. A., and won a scholarchip. He will return to Yale bext yoar and pur-te pust-graduate work. T. II. Boggs,
of Wolfville, and A. H. Taylor, of Kentville, graduates of Acadia, took the degree of B. A., the former receiving a fellowship and the latter a scholarship. Both will return to Yale for post-graduate work and as instructors nest year. H. W. Mantin, of P. E. Island, received the Ph. D. degree.

Graduates of other United States colleges, hailing from the Maritime Provinces, were,-University of Vermont, Burlington; Leslie Herbert Huggard, M. D., Henderson Comer, N. B.; Dartmouth College, Hanover, N. H., Wm. Jas. Campbell, Summerside, P. E. I., B A.; Wellesley College (Female) Wellesley, Mass., Hilda Alford Tufts, Wolfville, N. S. At Harvard University, Cambridge, Mass., Thos. M. Tweedie, graduate of Mount Allison, Sackville, in class of 'o2, special degree; law school degree of LL. B., William McKnight (A.B. University of New Bpunswick, 'or, Harward 'o2), formerly of Queens Co., N. B.

As a result of the recent Normal School examinations for license in New Brunswick, four candidates were successful in gaining a Grammar School License, six for Superior School ; forty-two passed in Class 1, one lundred and fifty-two in Class 11, and three in Class 111.

Misses Bessie B. and Clara A. Bridges, sisters of Dr. H. S. Bridges and Inspector H. V. B. Bridges, of New Brunswick, who have spent several years in teaching in South Africa, have been granted nine months leave of absence, a portion of which they are spending in Great Britain and on the continent of Europe. After visiting different points of interest and examining the work of some of the English schools they will visit Canada.

Mr. C. D. Richards, B. A., recently of the Woodstock, N. B., Grammar School, has been appointed principal of the Gibson, York Co., school.

Miss Julia Neales, after a year's leave of absence, the greater part of which was spent in England, will resume ber duties after the vacation in the Woadstock grammar school.

Sussex, N. B., is moving in the matter of a new school building. It is proposed to build one of brick or stone at a cost of from $\$ 25,000$ to $\$ 30,000$, on a plot of eight acres of land, situated on a commanding elevation. This will furnish a fine object lesson, especially the setting aside of a generous amount of land for school gardens and play grounds.
J. Hollis Lindsay, who graduated from the School for the Blind, Halifax, in June, 1904, has since been studying in the American Conservatory of Music, Chicago. Mr. Lindsay has just been awarded a diploma by the conservatory and has also further distinguished himself by carrying off the special gold medal of his class.

At the closing exercises of St. Joseph's College, which took p:ace in June, the degree of B. A. was conferred on two graduates and three others received commercial diplomas. Numerous prizes were distributed at the close of a successful year's work.

King's College, Windsor, N. S., has wakened from a long lethargy under the able and tactful administration of President Hannah. At the encæmial exercises, June a2nd, the president announced that forty new students are definitely assured for the coming year. At that time last year he had known definitely of only aight, but the number was
increased at the opening of college to twenty-five. The enthusiasm of President Hannal is catching. There is no doubt that his administration will be abundantly successful. With a growing engineering schoul at Sydney, a mining school at Glace Bay, money contributions flowing in, and other evidences of vitality, future progress is assured

The closing exercises of the Nova Scotia Normal school at 'lruro were held on the 22nd of Jia e. Yrincipal Soloan presided, and addresses were delivered by Hon. Judge Longley, Mr. James Fraser, Dr. Stockley, Ex-principal Calkin, Principal Soloan and Supt. A. H. Mackay. Mr. John LeBlanc, of Belle Cote, C. B., won the GovernorGeneral's silver medal for greatest proficiency, and diplomas were awarded to 152 successfui students.

The closing exercises of the Fredericton, N. B., high school, June 30 , were of more than usual interest on account of this being the centennial of the foundation of the school. During the last 100 years the school has been under the direction of nine different gentlemen, (a good record), including the last and the present principal, Mr. B. C. Foster. Supt. Dr. Inch stated that in his opinion the Fredericton high school was one of the best in Canada, and was at its highest standing at the present.

Dr. Ernest Hall, a school trustee of Victoria, B. C., is anxious to abolish the high school cadet corps of that city, on the grounds that military training in the schools is not sanctioned by the school act, and that it tends to foster a spirit of militarism. Cadet corps in the city schools of British Columbia and other cities of the west are certainly attractive features of school life. As the Victoria Colonist says, such training "tends to develop alertness, precision, punctuality and many other desirable qualities. No one denies its beneficial effects in strengthening and improving the body." The alert demeanor, amenity to discipline, healthy appearance of the boys in western schools is probably due in large measure to this training.

Nelson, B. C., Tribune: Our schools have during dine past session maintained the standard of efficiency which has distinguished them for so long in the province, and principals C. M. Fraser and Albert Sullivan are to be congratulated. Few cities in the province have a more efficient staff, and no one privileged to be present at the closing exercises in Miss Margaret H. Moody's classroom could doubt that both discipine, patriotism, and religious influence of the highest type pervade the atmosphere of the public school.

The St. Andrews Beacon urges upon the New Brunswick government the importance of increasing the salaries of teachers and the necessity of providing a residency in connection with the provincial normal school, adding that the boarding life of the pupils is far from being satisfactory, is a menace to their health in many cases, and is not conducive to good results in study.
A Dominion exhibition will be held this fall at New Westminster, and the superintendent of education for British Columbia, Mr. Alexander Robinson, has been asked, says the Colonist, to take charge of a proposed educational exhibit which will include for competition the whole of the schools of the province. The exhibit wiil consist of specimens of penmanshlp, drawing, manual training work, the ordinary routine exercises of the publiç
schools, the text books in use, and any other features of interest tha: may be suggested. The object of this most commendable scheme is to give to strangers, and visitors generally, a comprehensive idea of the educational system of the province as carried out in actual teaching in the schools. A committee, consisting of the superintendent, Messrs. Eaton and Argus, of Victoria and Vancouver, respectively, and three provincial inspectors, Messrs. Wi]son, Stewart and Gordon, will have the arrangements in charge.

The Edgehili School for Girls, at Windsor, N. S., closed a very prosperous year in June. The school is known everywhere for the excellent training it gives. Its locaion and surroundings, and the commanding view of the beautiful scenery about Windsor, are well fitted to aid in such a training. Miss Lefroy, the principal, has resigned her position whicl she has so admirably filled for several years and has returned to England.

The Netherwood school at Rathesay is another girls' school beautifully situated amid the fine scenery of the Kennebecasis. It has been growing in efficiency and popularity for years past under the wise and excellent management of Mrs. J. S. Armstrong, who has had associaterl with her for the past two ycars as principals. Miss: Pitcher and Miss S. B. Ganong. Mrs. Armstrong has retired from the principa:ship, thougn still retaining the duties of instructor in the school. The scholarship and experience of the ladies who have assumed the complete charge of Netherwood are an excellent guarantee of the future gond prospects of the school.

Mr. Ernest E. Fairweather becomes principal of Annapolis Royal Academy in place of Mr. A. W. L. Snith, resigned. Mr. Fairweather is a graduate of King's College and has distinguished himself as a student.

Mr. Frank E. Wheelock, B. A., (Acadia), has been appointed vice-principal of the Consolidated Scnonl at Middleton as teacher of grade 10 , and Mr. P. S. Banks takes the place of Miss Mabelle Fash as teacher of grade 9.

An interesting experiment is being tried at the Middleton, N. S., Consolidated School during the present summer vacation. Scholars are brought in relays from each district in turn, and under the charge of one of the instructors keep the school garden in order and continue their work in nature-study. No regılar indoor work is attempted.

Professor Roland T. Gray, a graduate of Ruchester University, has been appointed to the chair of English literature at Acadia in place of Professor Kierstead. The appointment is believed to be an excellent one.

## RECENT BOOKS.

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This system enmbaces the best and newest features which American phonographers of the Pitman school have produced. The author has combined these features and added other which should make the hoo's of great value to students oi shorthand.

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# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.
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p. ${ }^{2}$.
The teachers' iexsion scheme, as well as other matters brought before the Truro educational convention, will receive attention next month. The chief points discussed at this important meeting will be found on another page.

If teachers intend to observe Arbor Day next spring. it would be well to take notice this fall in what situations and soils certain trees grow best. Notice what a western schonl superintendent has said: ". "eachers take pine trees from the hills where they grow beantifully and set them out where they die speedily."

The October number of the Review, to be published on the first of the month, will contain material to assist schools in observing the centenary of Nelson's death. As this is to be celebrated in a fitting way all over the British world, our schools should take part $i_{11}$ it, especially becatise of its great historic significance.

The many friends of Professor W. F. P. Stockley will learn with regret of his intention to leave Canada and take up his permanent residence in his native country, Ireland, where his only daughter is residing. Professor Stockley's scholarly attainments. especially in the field of English literature, and his genial disposition has won for him many admirers and warm personal friends during the score of years that he has spent as teacher in three of the educational institutions of Canada - the University of New Brunswick, University of Ottawa. and St. Mary's College, Halifax.
O. the 21st of October of this year the British Empire will celebrate the centenary of the death of Admiral Nelson and Britain's great naval victory, the battle of Trafalgar. The "Victory," Nelson's flasship, on which he breathed his last in the hour of his triumph, has been preserved by the order of King Edward, and will remain as a floating monument of Nelson and Trafalgar. Damaged portions of this celebrated ship have been removed. and from this material souvenirs are being made and sold, the procects to be expended in establishing a Nelson's Memorial Fund, one purpose of which is to built! a Sailors' Rest at King's Lynn, the great admiral's birthplace. Those who contribute one dollar and upwards will receive a suitably inscribed medal or brooch, made of the copper of the "Victnry." Contributions may be sent to Edward W. Matthews, Limehouse, London. E. Any school contributing $E_{5} 5$ s. secures a shield, which becomes the property of the school, and may be offered in emmpetition for the best essay on "England's Indebtedness to Her Ships and Sailors," or other patrintic or naval topic to be chosen by the school: the successful pupil to retain the shield for one year.

There are over five thousand teachers in the Daritime Provinces. While the Review is read by the great majority of these, there are some to whom its pages are unknown. A gentleman occupying a high educational position, and a supporter of the Review for many years, said, in sucaking of its excellent character and its valuable contributions every month: How is it possible that a teacher ean do without it?
"The school is a little sute." said one of the speakers at the educational convention at Truro the other day, and there are ways in which this may be realized to the benefit of the child and the state. In several cities of the Cnited States a form of selfgovernment of sehools has been tried in the past few years, and the plan has been so successful that President Roosevelt, President Eliot of Harvard dad other eminent men have given it their approval.

The children of a school city organize, elect a mayor and council, make laws, have a regular city's charter, which may be revoked by the teachers if neeessary. The children become responsible for the discipline of the school, and the responsibility may extend to the play grounds, and even to the streets. The teachers are of course the ultimate source of authority, but by the exereise of tact and good sense they may not have to exercise it. The plan has been adopted by twenty-three schools of Philadelphia. A disorderly school of a thousand pupils in New York, that required the presence of policemen every day, became orderly and law-abiding within a week after a school eity was organized. Other instances are cited to show that in cities where it has been tried disorderly conduct ceased, and neater dress, better manners, improved scholarship followed. The pupils have manifested a surprising aptitude for practices of courts of justice, and some of their decisions and punishments have been found to be remarkably appropriate. And why not?

Will not some of our cuterprising teachers consider the plan and try it in their schools?

## Teachers' Salaries.

St. John City has just lost two excellent teachers from its high school staff: and this is the result of a higher appreciation of these ladies' services elsewhere, as will be seen in the paragraph in our " School and College " page. It is to le regretted that the school board could not have yielded to the repuest for a more adequate salary. It is presumable, however, that school boards and eollege boards
have their difficulties in such cases. Some time ago the Review quoted the instance of Professor Jeffrey, of Toronto University, who had macie a considerable reputation on account of his research work in botany. Harvard University wanted him, and having offered double the salary that his own university gave, secured him.

Similar instances oceur by the score every year. To retain the services of specially gifted teachers and pay them an increased salary would strain the financial resources of most of our scliool and college boards. That is not all. There are the other teachers on the staff to be considered; and these would smart at the injustice of an inerease in a special case without considering their own years of honest, faithful service. To pass over such services thus would discourage many worthy men and women, and result in a real educational loss - the loss of a teacher's independence and spirit.

The question of a proper remuneration for teachers is beset with difficulties. To pay by results, when time only, and perhaps eternity, ean determine these results, is not possible. Certainly the "results " of an examination are but slender tests of the real qualifications of a teacher. The only feasible scheme seems to be to raise the salaries of teachers all along the line, from the primary teacher to the professor in the university; and, in order to safeguard educational interests. insist on a wider experience, higher qualifications, and a more liberal culture for all teachers.

## Death of Prof. Davidson.

News of the death, in the 36 th year of his age, of Professor John Davidson, lately of the Cnıversity of New Brunswick, was heard with a sincere and widespread feeling of regret. He died on the 3 Ist July in Scotland, whither ill-health had compelled him to remove, with Mrs. Davidson, three years ago, on his retirement from his duties as professor. His ten years of able work in the university, the zeal and industry with which he devoted himself to public and philanthropic morements, and the sympathy for him in his brave struggle with disease won many warm friends. He came to New Brunswick when twenty-three years of age after a brilliant school and university carcer at Edinburg. the city of his birtli. His strong personality and his gifts as a teacher and author made him a prominent figure in educational circles. He entered into lis work at the miversity with enthusiasm, inspiring his students with his original methods and
his earnest convictions in whatever canse he championed. His work was by no means confined to the university. The social, financial and industrial problens of Canada were studied with a breadth of outlook and a mastery of detail that gave promise of greater fulfilment with maturer years. His contributions to British and American periodicals and his books on economic subjects won for him the reputation of a keen and thoughtful observer and an indefatigable worker. His heroic spir:t fighting almost to the last hour with that dread discase, consumption, is well shown in the paragraph quoted from the Edinburg Despatch:
"During the montlrs of his enforeed seclusion from the duties of his chair. Dr. Davidson was by no means idle. Articles on subjects relating to the branch of science in which loe was a specialized student appeared steadily in L3ritish and American journals and periodicals; he did a large amount of work upon the Nelson-Harmsworth Encyclopedia; and he week by week eontributed valuable political and economic articles to the columns of the Weck's Suriey, since it changed hands in December last. Only on Tuesday last he insisted upon sitting up in bed to complete an article for the Week's Sureey. saying that he had never failed anybody yet. But this time the task was beyond his power, and he had to lay down his pen for the last time. Death ensued on Friday."

## A Long and Well-Spent Life.

Hon. David Wark, I.L. D., Senator, slied at Fredericton, ㅅ.. B., on the 2oth of August, in the one humdred and scoond year of his age. His life was simple, serene, honest, substantial, and without ostentation; his end was peacefnl and painless. Born near Londonderry, Ircland. February igth, 1804, he came to New Prunswick in 1825. He taught school for ten years, chiefly at Richibucto, where the afterwards engaged in mercantile business. In $184_{2}$ he was elected to represent the people of Kent in the I'rovincial Issembly, and up to the time of his death was identified closely with the industrial and political interests of the province. His legislative career extended over sixty years. and he was the oldest active legislator in the world. He took part in the lengtly session of parliament at Ottawa in 1904. He was then in his ionst year. with his mind clear and his judgrment good. His career was a uefful and happy one. Service and duty were his watchwords, and faithfully did he discharge every obligation.

## Mutual Improvement Associations.

Every town, village and hamlet should have its Mutual Improvement Association, which may be active both in summer and winter. During the latter season the association may meet from house to house for social and literary improvement. A library is necessary. If there is none in the village, a travelling library may be secured at a mere trifle of an outlay. During a recent vis't to the McGill Unversity library the writer was shown choice assortments of books which are loaned, on application, to country schools, reading clubs, and communities possessing no frec public library. These books have been carefully selected and grouped according to the wants of those using them: (I) for general reading; (2) for young people; (3) for students of special subjects. Each travelling library, consisting of twenty-five books, is loaned for a term of three months, on conditions which are sent on application to the librarian of McGill Univers:ty.
loramed pictures suitable for hanging in a schoolroom may be sent with the travelling libraries, but not more than two at a time, and these may be changed as often as the library is changed.
Thris is an opportunity-and there are others of which schools and commmities may avail themselves for mutual improvement. As the Review has frequently urged in the past, teachers should take the lead in this improvement in communities in which they are living.

During the winter also plans may be formed. to be carrict out in the summer season, to make the town or district more attractive. An appeal may be issued by the Improvement Assoc:ation, which should have as many members as possible, and embrace representatives from all classes in the community, urging all to carry out some such programme as the following:
r. Burn all rublish possible, and bury that which camot be burned.
2. Do not throw paper or other litter on the strects. (When streets are once free from unsightly rubbsh, people will be anxious to keep them so).
3. Persuade people who must smoke not to do so on the strects, or "n public places in the presence of ladies.
4. Do not spit on the sidewalk or on the floor of any public place or conveyance. (The public spitting nuisance is fast becoming obsolete in every civilized and well ordered community).
5. Persuade owners of property to destroy and keep down the weeds just starting. especially those
on their grounds or along the strects or in vacant lots.
6. The example of well kept, orderly arrangement of lawns and houses is quickly followed; therefore let the members of the Improvement Society have the: r lawns and gardens neat, flowers and shrubbery planted in them; houses and outhouses painted, fences and gates repaired, and everything about their premises kept neat, attractive and orderly.

## Japan's Naval Record.

Since the first of February, 1904, the newly created navy of Japan. with some co-operation of the army at Port Arthur, has sunk or captured sixty-five Russian vessels, including fourteen battleships of the first class, twelve armored or protected cruisers, four auxiliary cruisers, three coast-defense iron-clads, eleven gun-boats, and twenty-one tor-pedo-boats and destroyers. It has also killed or captured eleven Russian admirals, and has taken as prisoners about ten thousand men of the naval rank and file. It has not suffered a single defeat, and although twelve of its vessels have been destroyed by accidental collisions and percussion mines, it has not lost in action, a single ship larger than a torpedo-boat, and it is probably stronger and more efficient than it was a year ago. Such a record as this is not only extraordinary, but absolutely unparalleled; and when we consider the fact that these results have beeil attained, not by accident or luck, but by organization. practice, good judgment and consummate skill, we must give Japan credit for producing not only good seamen and gunners, but naval commanders worthy to take rank with the first in the world.

Saigo was the teacher of Togo, the 1lustrious Japanese admiral, and among the precepts of the teacher that seem to have influenced the pupil throughout his career are the following: "Where you see faults, take the blame of them yourself; where there is merit, attribute it to others. Act resolutely and the very gods and devils shall flee before you."-George Kennan, in the Outlook.

## September Calendar.

September 4tll is Labor Day-a public holiday.
September 29th is Michaclmas Day.
September 30th, the first day of the Jewish New Year, begins the year 5666 of the Jewish era.

## Nature Study.

Children luunting a lost ball in a meadow adjoining the play-yard discover a ground-bird's nest with four blotched eggs. Their interest is aroused. They describe the nest to the teachers and inquire to what brd it belongs. Unfortunate for them, if he is scientist enough and unpedagogical enough to say at once: "It is a bob-o-link's nest." Better were he a good teacher and no ornithologist, for then he would use their interest to lead to some educational activity which would be far more useful to them than the mere information they seek. But best of all if the teacher knows well both childrenl and birds. In that case he can guide them to discover the answer to their question in an educative way, and in doing so excite them to ask and answer by research many other related questions. He engages their interest at the favorable moment to train them to observe, think, investigate and enjoy. This is Nature study.-From Dearness's "Nature Study Course," by permission of Copp, Clark and Company, Publishers.

Eliza and Sarah Flower were gifted English sisters whose earthly lives began and ended between the opening and the close of the first half of the last century; and yet in that brief period both left their impress on their generation; and the younger, Saral, achieved undying fame by composing the beautiful hymn, "Nearer, My God, to Thee." It was suggested by the story of Jacob's vision at Bethel, as found in Genesis xxviii, $10-22$. The hymn was first published in 1841, and although it met with some favor, it was not until I 860 that Dr. Lowell Mason's beautiful and sympathetic music "quickened it into glorious life" and gave it a permanent abiding-place in the hearts of the people.The Delineator for September.

Sumatra grows the largest flower in the woril. It measures a yard and three inches across, and its cup will hold six quarts of water. Rafflesia Arnoldii is its name.-Philadelph:a Bulletin.

The smallest and simplest flowers in the world, consisting of a minute stamen and pistil, are probably the species of Wolffia, which grow near the surface of stagnant water as little grains, attached to rootless leaves which float. They are found in Canada near Lake Ontario.
"I found your August number full of helpful suggestions."-M. A. H,

## Chipmunk and Red Squirrel.

Beneath the grassy lawn of our home in the country a chipmunk has made its abode for several years. It is quite tame, and seems to delight every time it goes into or comes out of the narrow hole to sit for some moments in a varicty of pretty posings very interesting to watch. Every small fruit tree in the neighborhood is visited in turn by the industrious "chippy," and by the end of autumn its snug little winter home underground must be well provided with good things. In the bright warm days of June last the mother chipmumk brought her alert little family of two groundlings to sun themselves on the lawn and play a variety of cunning tricks-for our bencfit, we might suppose. but really to make them acquainted with the ways of a naughty. world. On the slightest hint of danger, the youngsters vanished into their holes like a flash. Alwars they were the first to go, obeying instantly the warning signal of the mother, whatever it was, while she stood guard over the hole, into which she, too, quickly retreated if we showed a desire to make a closer acquaintance.

After a week or so the little ones were no longer seen. They have now probably built homes of their own, and are storing them with food for the winter. They were beautiful little creatures, the image of the mother, dainty in form, and graceful in movement. Their sleek coats were softer in color than the mother's brownish-grey on the back, which warms into a reddish brown on the forehead and hind quarters. The black stripes on the sides formed a pretty contrast to the pure white of the throat and under parts.

A lady-visitor to the lawn the other day made a "snap-shot" of our little friend, the chipmunk. which is here re-produced. Its bright eyes stared

in timid wonder on the camera. It recoiled for a moment at the "click," but sonou promptly returned to "position." This posture, which it assumes on coming ont of its hole, is cvidently one of recomnaissance, its keen little eves scaming every nonk
wherein an enemy may lurk, its delicate nostrils scenting every danger. When it is assured of safcty, it scampers off by a succession of jumps to the tree from which it is obtaining its stores, and always by the one path, which it seems to have markcd out for itself. For the past week or so its favorite honting ground has been a red cherry trec, at the foot of which is an arm-chair. While we were all gathered rombl this a few days ago listening to the realling of Roberts' "Scourge of the Forest," $i_{11}$ which is described the fleeing of terrified animals big and little-before the swift forest fire, the chipmunk went its usual way, clitnbing up the chair over the slecve of the reader, and into the tree, not conscious of our presence, as long as we betrayed no consciousness. Filling its cheek pockets with cherries, it returns by a different way, but always the same for its homeward journey; it panses at the month of the hole, assumes its upright posture, and then with its front paws procceds to arrange the food in its distended cheeks as compactly as possible, so that it may not "stick" in passing through the narrow hole. For chipmunks have enemies who would like to follow the little storekeeper, if they could squecze through the long narrow portal which leads to its treasures.

One wishes that other people were as tidy about lawns as the chipmonk. He never leaves any stray bits of food or refuse, like banana peels, about. Whatever he does with the earth that he digs out to form the tunucl-like home under ground, no one knows, for not a trace of it can be seen. He proFably carrics it away in his pocket-like cheeks, and hides it. He does his work secretly and effectively, like a Japanese soldier, and is very successful in concealing his whercalonuts from an encmy

He is an independent little chap, too. We have tried to help him in his work by placing peanuts near his hole; he refused to take any notice of them. Perliaps he found them not to his taste: but we would rather believe that he scorns to enjoy what he has mot earned.

A little five-year-old son of our neighbor wals observed to be fery busy gathering fireflies during an evening walk. On his return to the lawn, lie pushed these into the chipmunk's hole, saying with a satisficd air: "There! now you can sce to go to bers."

## The Red Squirrfl.

Some time ago a tall spruce tree interrupted our view of the St. John river. It was decided one day about mid-summer to cut off the top; but the young
man who climbed the tree to do this met near the top with that tangled mass known as "witch's broom," which completely barred his way. He sawed the trunk below this. and when the top tumbled to the ground the "broom" was found to contain a red squirrel's nest, ont of which scrambled two feeble young ones, just alle to crawl. What to do with the helpless family was a problem. The parents were nowhere in sight. The plaintive squeals of the little ones made us anxious to repair the mischief we had inadveriently done in breaking up a happy honc. The sawed-off top containing the nest was propped up against another tree, and preparations were made to make the homeless orphans comfortable for the night.

In doing this the nest was carefully examined. It was a fine piece of natural work, and no one would have guessed what this roind mass of twigs and small branches could possibly hold. It had no doubt been a squirrel's nest for years, and there were evidences of broods of children, and perhaps grand-children, having been reared in this family tree. There were two entrances, one above and the other below, leading to the inside, which was a compact room or serics of rooms woven round with sticks, grass, leaves and moss, so as to make it completely storm proof. It was as comfortable and safe a little home as the ingentuity of a squirrel could invent.

There was no food in the house. The red squirrel's habits lead it to store up its winter stores of nuts, acorns, cones, grain, etc., in the fall, not in its nest, but in crevices, holes and various nooks near the trec in which it lodges. These it visits even in winter, going straight to its hidden stores and digging them out from under the snow. What a memory it must have! The chipmunk or ground squirrel's habits are different. It stores in different channels or rooms in its burrow food for the winter. Late in autumn we have seen it carrying in its distended pouch dried leaves, which it cvidently uses to make a comfortable bed, and to strew the approaches to it, to prevent the entrance of frost and snow.

While we were cngaged in an awkward attempt to make the baby squirrels comfortable for the night. the mother appeared with an angry chattering and eyes that fairly danced with rage and maternal anxicty. We stoorl aside and watched. Pouncing upon one of her offspring she turned it over on its back, drew it close under her, patting it all the while with her paws, gathering the little one's
tail about her neck, its hindpaws close to her bodv back of the shoulders, and its forepaws close up to the body under her own hind quarters. This occupied futly five minutes, while we stood only a few feet distant gazing on with breathless interest. Finally when the little squirrel had been so close! $y$ packed to its mother that the two scemed to be one. the mother ran up a tall spruce near by, and, leaping fearlessly from branch to branch, was soon lost sight of in the woods. She came back in about ten minttes and went through exactly the same process with the other, scurrying over the trees to the new home she had evidently prepared in her need.

For days after if any of our househo'd appeared on the scene of the outrage the mother treated us to a volley of squirrel abtuse, leaping from branch to branch within a few feet of where we stood, and eager to wreak its spite on those who had despoiled her home. In its rage it reminded us of the squirrel of the Indian legend: The mythical Glooscap once brought all the wild animals before him, and asked each what he would do if he met a man. The squirrel was at that time as big as a man, and when it came his turn to answer, he flew at a stump and tore it with his teeth and claws. Then Glooscap thought him too dangerous an animal, and reduced him to his present size.

## Ingleside.

At a banquet given in England during the recent visit of the Canadian Mantracturers' Association, the following story was told to illustrate the importance of union for trading purposes: "A school boy was asked by an inspector:
." Would yout rather have half an orange, or eight-sixteenths?
"' Half,' said the boy.
"' Why,' asked the inspector, scenting a weakness in fractions.
"' Because,' said the scholar, with the sixteenths you lose such a lot of the juice.'"

The celebrated grape vine in the conservatory at Hampton Court, England; planted in 1769 , had in 1830 a stem 13 inches in girth and a principal branch II4 feet in length, the whole vine occupying more than 160 square yards; and in one year it produced 2,200 bunches of fruit weighing on an average a pound-in all, about a ton of fruit.-Scientific American.
"Your paper is a source of inspiration to me, and I enjoy reading it each month."-J. M. D,

## . September Talks.

The following topics are suggested for talks and observations during the month of September. They are such as occur to the editor. Some are selected from working plans in other places. Many other kindred topics will present themselves during the month to the thoughtful teacher.

What is the name of the month? Is it the seventh month as its derivation (Latin, septem, seven) suggests?

Which was formerly the first month of the year? (March).

How many days has September?
Name the other months that have the same number of days? Those that have 31 days?

What season does September usher in?
How many months in each season?
Are the days growing longer or shorter? How can you tell?

Which are longer, the days or nights, during the first part of September?

During the latter part of the month?
When are days and nights about equal during the month?

At what other time of the year are they equal?
Are the days and nights growing warmer or cooler? Why?

Which is the harvest month of the year? When does the "harvest moon" occur? Why is it so called? What is its peculiarity?

Make a list of crops harvested in Septenber? In August?

Are September days usually fine or storny?
What advantage is that to the farmer?
From what direction does the wind usually blow on a fine day?

Is the green color as fresh in the fields and on trees as in June or July?

What colors are taking its place? Why?
What wild flowers are most common this month?
What colors are most common in the flowers?
What wild flowers that blooned earler in the season have now gone to seed? Collect some of the seeds and study them as to use, form, color and covering.

Are there many flowers now in the school garden? In the home garden?

Can you name them?
Are the leaves of the trees still green?
What other colors do you notice in leaves?
Are plints growing as actively now as furing the summer?
[The gradually lessening green color shows that plants are not now as active. In fact the active per.od of growth is over early in September in most plants, except the second growth of grass, clover and some other plants. (Can you think why?) The plant food remainng in leaves and young twigs will be drawn into stems and roots to be stored for the winter.]

What birds are seen now?
Do they sing as much as in May or June? Why not? (Early m the season they are mat ng. Now they are getting food for their young, teaching them, and preparing for the flight to the south).

Ask the boys and girls where they went during the summer vacation. If in the country, get them to tell what the farmers were dong, and make these observations the subject of lesson-talks.

## The Empty Crayon Box.

A little thinking will enable a teacher to make some profitable use of the empty crayon box. By measurement the cubical contents may be computed and it may thus becone a convenient measuring unit. Cutting off an end at the right length the dry quart, liquid quart and liter may be readily made. A sharp pen-knife and a few small brads are all that are needed in this. Ends and sides, holding as they do by mortise and tenon, may be set to show various angles. Sides, ends, tops, bottoms, can all be used in making models of various surface forms, rectangles, triangles, etc. The ingenions teacher will put some forms together for drawing models. Six-inch rulers and decimeter rulers may be in the hands of each pupil by using materials from the crayon box. Even the physiology class may get an idea of the real capacity of the lungs, stomach, etc., by knowing the cubic inches represented by the crayon box.

The uses of the ordinary shade stick may be extended into the school-room. No teacher need to be without a yard stick showing feet and inches. Also the meter with its divisions can readily be made from a shade stick. Nearly all arithmetics have the decimeter measure shown. A piece of paper cut the length of this measure and haid ten times on a shade stick gives the meter. It would be well if pupils could sce these measuring units commonly in use and in comparison.
The wide-awake teacher is continually making use of common materials and finds her funds never fully exhausted.-Sel.

## August and September in Canadian History.

August w.tnessed some of the most stirring events of the war of 1812; in September (I755) the Acadians were driven from their homes in Nova Scotia, and it was during that month (1759) the great battle was fought at Quebec which won Canada for the British.

August 5, 1689. Massacre at Lachine by the Iroquois.

August 7, 1900. Hon. A. G. Jones became Governor of Nova Scota.
August 9, 1842. Settlement of the boundary line between Canada and the United States by the Ashburton Treaty.

On the Ioth of August, i535, Cartier cast anchor in a small bay on the Labrador coast, which he named St. Lawrence in honor of the festival of that saint ; and this name was afterwards given to the great bay and river of that name.

August 16, 18ı2. Detroit surrendered to a British and Canadian force under General Brock.

August 16, 1785. New Brunswick formed into a separate province.

August 18, 1833. The steamer "Royal William," the first vessel to cross the Atlantic with the motive power of steam, left Pictou for London.

August 23, 1898. Joint High Comm ssion met at Quebcc.

August 25, 1860. Opening of V:ctoria Bridge, Montreal, by the Prince of Wales (now King Edward VII).
September 1, I880. All British possessions on the North American continent, except Newfomndland, declared annexed to Canada, together with the Arctic Archipelago.

September I, r905. Alberta and Saskatchewan become provinces of Canada.

September 1, 1860. Laying of corner stone of parliament building at Ottawa by Prince of Wales (now Edward VII.)

September 1, 1864. Confederation conference at Charlottetown.

September I, 1904. Earl Cirey appointed Gov-ernor-General of Canada.

September 3, 1783. Treaty of Versa:lles. Tndependence of the Cinited States acknowledged.

September 8, 1760. Montreal surrendered to the british.

September 13, 1759. Jattle of the plains of Abraham, and surrender of Quebee on the 18 th september following.

September II, 1814. Defeat of a British fleet on Lake Champlain.

September 13, 1902. Death of Sir John Bourinot. September 13, 1813. Defeat of British fleet on Lake Erie.
September 16, 190r. Duke and Duchess of York enter Quebec on their visit to Canada.

September 17, 1792. First meet ng of the parliament of Upper Canada at Newark (Niagara).

September 19, 1889. Landslide from Citadel Rock, Quebec; $4 \dot{5}$ persons killed.

September 28, 1892 . Legislative Council of New Brunswick abolished.

## How to Teach Addition.

By Inspector Amos O'Blenes, Moncton, N. B.
The almost universal habit of counting in the lower grades, instead of using the tables for add ng, may be prevented by the following method.

Develop ideas of numbers to 10 .
Teach the Arabic numerals.
Teach counting to 100 .
Teach the reading and writing of numbers to 100 .
In teaching children to read and write numbers the follow $n g$ device will save time: Place a number, say 75 on the board. Print the letter $t$ between the 7 and 5 , thus $7^{t 5}$. The teacher points to the 7 , the $t$ and the 5 , while the pupil reads seven-ty-five. Ask him to repeat quickly, and he has seventy-five. With numbers between 20 and 30,30 and $40, .50$ and 60 , a change in the pronunciation will be needed. The $t$ may soon be omitted, while the pupil reads as though it were used. In writing numbers, use the $t$ at first. Pupils who can count may be taught to read and write numbers to 100 in two or three short lessons.

As a preparation for adding, the following drill should be given: Write all the numbers from to to Ion on the board, and drill the pup is until all can tell the last (right hand or units) figure of any number without using the board. Then ask such questions as the following: What is the first number after io whose last (right hand or units) figure is 4? after If whose last figure is 7 ? etc., until the answers can be given quickly even with the numbers erased.

Next teach the tables of ones and twos. that is, add one to each digit. then two to each digit.

The pupil should be able to answer any question on these tables withont hesitation or counting before he is asked to add a column of figures.

Next place on the board a long column of figures, as in the example appended, 2 using only ones and twos, except for the 2 bottom figure.

I
Add in the following way: 2
Question. Nine and two are?
Answer. Eleven.
Write the II to the right of the column.
Add the last figure of the II to the next
figure in the column, using the pointer.
Q. One and One are?
A. Two.
Q. What is the first number after II whose last figure is 2?
A. Twelve.
Q. Two and two are? 2
A. Four.
Q. What is the first number after 12 whose last figure is 4 ?
A. Fourteen.

Proceed in the same way to the top of the colum, placing the results to the right.

After a few columns have been added in this way the pupil sees how the knowledge he has acquired may be used in adding. He should be allowed to use the column of results to the right for some time until all other difficulties are overcome.

The repetition (refer to example) of nime and two are eleven; one and one are two, twelve; two and two are four, fourteen; four and two are six, sixteen, etc., should be continued until all danger of counting is gone, or until considerable speed has been acquired. Then the adding may be done by simply giving the results, thus (refer to example) nine, eleven, twelve, fourteen, sixteen, etc. When the tables of threes have been learned, threes may be used with the ones and twos, and so on with the other digits. By the time all the tables have been learned the pupil should be able to add accurately and with considerable speed.

The success of the work will depend largely upon the amount of drill given. Teachers who cannot find time to examine all the work will find that pupils can soon be taught to make questions for themselves and prove them by adding each question until the same result is obtained three or four times.

The interest in the work may be sustained by frequent test in rapid adding among groups of about the same ability. I have frepuently met with pupils in grade one, taught by the above methort. who could add as rapilly and accurately as oht accountants. Give it a trial.

## The Aim of Good Teaching.

It is vain for a teacher to attempt to work up an appearance when the reality is not there; girls and boys readily see through all such thin disguises. No word is needed; the feeling of the teacher is known at once, and the pupil takes a sympathetic attitude, believing that the teacher is right, and that following her cannot lead him far astray. The same holds good in regard to the moral and religious character of the teacher. No spoken words are needed to put the pupil in accord with her in this higher domain. The instructor of character goes about among her pupils shedding upon them the light of her bencficent example, leading them to appreciate and enjoy what is grand and true instinctively. In fact, it is better that the ordinary teacher should not endeavor to give too much direct religious instruction, for religion can no more be taught than any other virtue can. Virtues are lived, and the strong imitative faculty of the child leads to the cultivation of traits that are admired. The true teacher aims to train the pupil to be strong enough to live her individual life without the help that some teachers think necessary to give their pupils. Pupil and teacher are inevitably destined to part at some time, and the teacher who encourages her charge to be dependent upon her trains to weakness and to sure failure when the parting tine comes.-Arthur Gilman, in the August Atlentic.
"Don't tell me," said a teatcher who has to deal with this motley crowd, "that 'All men are born equal,' for that is positively false."
"No; but the correct quotation, 'All men are created equal,' is true, and we are trying to lead upward those who have fallen, to the heights others have gained," was the happy answer.-Selected.

An old crab said to a young one, "Why do you not walk straight, my child?" "Mother," said the young one, "show me the way, will you? When I see you walking straight, I will follow you."

> When V and I together mect, They make the number six complete, When I with V doth meet once more, Then 'tis they two can make up four, And when that $V$ from I is gone, Alas! poor I can make but oni.
"I take much pleasure in the reading of your interesting and valuable paper."-F. H. K.

## N. S. Provincial Teachers' Association.

A large number of teachers from all parts of the province came together at Truro on Tuesday, August 22nd, for a three days' conference. The programme was a good one and the discussions spirited.

In the opening address, Dr. A. H. MacKay spoke of the use and abuse of the course of study. It should be used as a guide, not as a law to be slavishly carried out. Dr. Jones, of Acadia College, advocated thorough drill in clementary mathematics. Principal Smith, of Port Hood, would encourage private study by allowing students to write on as few subjects as they chose at the Provincial examinations, and having certificates of standing granted by the Council of Public Instruction.

Mrs. May Sexton, S. B., Halifax, in a very interesting address called attention to the value of the study of science in developing the power of correct observation, the ability to draw conclusions, and to give expression to one's thoughts. A study of the natural sciences fosters a spirit of truthfulness, a respect for law and order, a love of the beautiful, and a certain resourcefulness in every day affairs.

Dr. Ira MacKay, Halifax, thought that it was better to inflict corporal punishment than to say sharp things, or to allow pupils to form bad habits. Teachers have the authority to do so, if it is for the best interests of the school. Whether the punishment is excessive or not must be decided by the judge.

Judge Chesley wished teachers to bear in mind that character building was of far more importance than giving information. This, in fact, was the keynote of the whole convention. " Give us men of upright Christian character" is the demand of the day; and "How shall we meet that demand?" is the problem of the teacher. Judge Russell would have more attention paid to the study of hygienc. He would also rule ont intercollegiate sports. Judge Longley would have more attention paid to the study of civics.

On Tucstay afternoon an excursion to the Govermment Farm and Agricultural College was enjoyed by the members of the Association.

On Wednesday Rev. Father Sullivan, of St. Bernard's, Digby, opened the session with a talk on How to Teach Children to Think. He would stimulate curiosity, cucourage close observation and endeavor to strengthen the power of attention.

Miss Lavinia Hockin, B. A., Amherst, in an admirable paper, treated of the Public School as an Agent for the Development of Moral Character. She would, like the Great Teacher, lead her pupils to love God and their neighbors. The teacher must do this herself, however; for no matier what she might teach, her own life wonkl be taken as
the standard. All acts of meanness referred to in the lessons should be condemned, and noble acts commended. Habits of punctuality, order, neatness, self-restraint, should be developed by continued watchfulness on the part of the teacher. See that the children have the right kind of reading matter, and that they have noted the good qualities in the characters dcpicted there.
S. A. Morton, M. A., Halifax Academy, brought forward a scheme for pensioning teachers, part of the expense to be borne by the teachers themselves and part by the Provincial Government. A committee was appointed to further consider the matter.

Principal Crombie, Bridgewater, wanted the teachers to organize, and make an effort to secure ligher salaries.

Miss Estella A. Cook, B. A., read a paper on the valuc of music in the schoolroom as an aid to discipline; for short periods of recreation so necessary during long sessions in order that the child's mind may be kept at its best; for securing deep breathing so necessary to the health of the pupils; for the patriotism and purity imbibed by the pupils as they try to express feelingly the spirit of the song.
Rev. Father O'Sullivan, St. Mary's Cathedral, followed this with an explanation of how singing might be successfully taught beginners by the tonic sol-fa method of notation. The reverend gentleman admirably illustrated his method by putting a class of boys he had trained through a number of excrcises.

Niss Amna B. Juniper spoke of the importance of teaching household science in our schools, and outlined a course of study that might be carried out with advantage.

Rev. Henry D. deBlois, M. A., Annapolis, a vetcran on educational matters, thought that the great fault of our present system of education was that we attempted to teach too many subjects, and our work was, therefore, superficial. He would have more drill on a few subjects. He also thought that better results would be obtained if the old method of spelling by syllables was again brought into use.

Judge Chesley suggested that the teachers take advantage of the interest arouscd at the time of c! cctions in fix upon the children's minds the duties of our public officials and the heinousness of political corruption. When teaching history, the horrors of war, and the advantages of settling disputes by arbitration should be dwelt upon.

Dr. Eliza Ritchie. Halifax, urged the teachers to lead their pupils to admire the beautiful in the world about them, in sea and in sky, in the flight of the swallow. and the curve of the waving grain. She would also have them know something of the history of the finc arts, and of the lives of the masters. She wonld have the school-room ornamented with with a few good pictures. and much attention given to drawing and modelling. The address was illustrated by stercopticon views, which added very much to the interest.

At the Thursday morning session Loran A. DeWolfe, B. Sc., Truro, spoke of the advantages of Nature Study. The study broadens a child's interests, and opens up vast opportunities for pleasure as well as profit. Here the child traces the relation between cause and effect, and this shows the fallacy of his superstitions, leads lim to discover the best way of doing his work, and induces him to search for the comection between disease and its cause and remedy. He advised that as far as possible the study be correlated with other subjects, and also that frequent outdoor excursions be made.

Major B. R. Ward, R. E., Halifax, spoke of the work of the l'arents' National Educational Union of London, and suggested that branches be established in Nova Scotia. It claims as a child's rights a disciplined body, a nourished mind, an instructed conscience, a trained will, and a duickened sonl. Teacher and parents would come together in their union meetings and the home and school training be harmonized.

Justice Longley thought that since the state had taken the education of the children out of the parents' hands, the parents do not have as keen a sense of their responsibility in educational matters as they should have. He hoped that the establishment of these unions would awaken in them a sense of their duties in this respect.

Prof. E. W. Sawyer, M. A., Wolfville, thought that the subjects of the high sclool course and that of the colleges did not harmonize, and that much time was lost. He would have a committee appointed to look into the matter and suggest improvements.

Dr. DeWitt, Wolfville, said that health was a child's greatest blessing, and that the stuly of hygiene should be given a formorst place in his studies. He would have the pupils inspected periodically by a medical doctor, and weak ones relieved of heavy duties. P'upils should be taught the germ theory of disease, and know that the growth of these germs was favored by dampuess. darkness and dirt. The spreat of the germs of consumption, the " white man's plague." is due to the sputem, and if all sputem were burned the disease would be stamped ont. He recommembed that damp cloths be used to clean blackbords, and these cloths burned. The dust raised ley the use of brushes is injurions to the lungs, and often comtains germs of disease.
J. E. Alaclicar. 13. A., Amherst, criticised the present method of teaching penmansinj, Inok-keep ing, drawing and music rather mavorally.

The scheme for pensioning teachers wain andopted by the Association, and a committer appointed to bring the matter before the legislature.

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Irobably the most important results to the aver-- age teacher of such a comvention as that held at Truro are the general impressions which he carries
away with him and the inspiration which he receives. 1 am such an average teacher, and on request of the editor record such innpressions as I have received without having hampered myself by taking notes.

In his paper on the School Course of Study, the superintendent showed us how much more flexible the course was than might be inferred from current criticisms upon it, there being a full course for each grade of larger schools, and contracted courses for smaller graded sehools and miscellaneous schools; and furthermore, that over-pressure was due in most cases to local conditions.

1) r. Jones, in his paper on the Teaching of Mathematics, and Dr. D. A. Murray in discussing it, emphasized the importance of being concrete in teaching clementary mathematics, urging the use of graphical representation and numerical calculation Wherever possible. The time-honored use of Euclid's Elements for a begimer in geometry was attacked severely, and mathematical drawing commended.

Principal Smith, of l'ort Hood, pointed out the success of correspondence schools, urged the use of academies and high schools as centres of what might be termed "secondary education extension." The discussion bronglit out the lesirability of extending the system of "partials" to the D, C and 13 grades.
Scientific training in the problic schools las been often urged and defended, but never, 1 think, with more carnestness and literary grace and expression than by Mrs. May Seston. The very fact of a cultured lady ranging herself upon its side is a victory indect. Brietly, secentific training rightly tanght gave children the power of observation and of inference from observations made, the text-book being the anthonity ow which to turn only when in perplexity or doubt. Such traming has the merit of comnecting itself with the ont-of-school life of the chikd. Such teaching of science, lowerer, must not be makle the subject-matter of examinations.

In order to ajpreciate Dr. Ira Mackiay's address ont Conporal l'unishment, its Moral and Legal Aspects. one needs whear it delivered. (iiven mally, it was marked by elofuence, momal eamestness and deep knowledge of the subject. The teacher is both artist and artisath. his duty is on produce characters of monal beathy amb of utility 10) steciety. This he does as the agent and representative of the state. The school is a little state, and its laws and regulations are no more conventions
thian those of the state, and are as sacred. The teacher, therefore, has undoubtedly the power of corporal punishment. He has-
I. Full jurisdiction during school hours and on school grounds.
2. Concurrent jurisdiction with parent over child on his way to and from school.
3. Limited jurisdiction after school hours.

He is subject to limitations of excessive punishment and permanent injury to health, which are matters of fact and can be decided only by a jury.

In its moral aspect, the use of the rod is more impersonal and less liable to cause ill-feeling than sarcasm or scolding. But it should only be used for such offences as lying, stealing, impurity. blesphemy, etc.

The aim of corporal punishment is not retributive or reformatory, and so forth, but a combination of all these, $\mathrm{l}_{11}$ short, it is moral.

> -Average Teacuer.

## President Eliot on Art Education.

President Eliot, of Harvard, said some very pertinent things regarding education at the recent dedication of the Albright Art Gallery at Buffalo. After calling attention to the point that the main object in every school should be to show the chitdren how to live a happy and worthy life, he added in part:
" It is monstrous that the common school should give much time to compound numbers, bank discount and stenography, and little time to drawing. It is monstrous that the school which prepares for college should give four or five hours a week for two years to Greck and no time at all to drawing.
"All children should learn how lines, straight and curved, and lights and shatles, form pictures and may be made to express symmetry and beanty. All children should acquite by use of pencil and brush power of observation and exactness in copying, and should learn through their own work what are the elements of beauty. After reading, spelling, writing and ciphering, with small numbers and in simple operations. drawing should be the most important common-scheol subject.
"There is great value in the sense of beauty. The enjoyment of it is unselfish. During the last twenty years phifanthopists and educators have made womderful progress in implanting and developing the sense of beathty in the minds of the people. This is shown in the establishment of public parks. cultivation of flowers and shruls, and in the erection of beautiful buildings."
"To go to school," President Eliot continued, " in a house well designed and well decorated gives a pleasure to the pupils, which is an important part of their training. To live in a pretty cottage surrounded by a pleasing garden is a great privilege for the country-bred child. The boy who was brought up in a New England farmhouse, overhung by stately elms, approached through an avenue of maples or limes, and having a dooryard hedged about with lilacs, will carry that fair picture in his mind through a long exile, and in his old age re-visit it with delight. When a just and kindly rich man builds a handsome place for limself and family, his lavish expenditure does no harm to the community, but, on the contrary, provides it with a beautiful and appropriate object of sympathetic contemplation." $-N$. Y. School Journal.

A correspondent at Tipton, Iowa, sends us two characteristic anecdotes told by Booker T. Washington in a recent lecture in that town: "When I first started teaching," he said, "I taught my pupils in a hen-house. I went to an old darkey one day and said, ' Jake, I want you to come over and help, me clean out that chicken-house across the way.' Jake answered with a twinkle in his eye, 'Why, boss, I daresn't go there 'in the daytime. We niggers do that kind of work at night.' "
"It costs $\$ 1.89$ a head to educate a negro boy in the south, while in the State of New York it costs $\$ 20.55$ to educate a white boy. Now, the way I look at it," said Booker Washington, "is this,--the white boy must be awfully stupid since it takes that much to educate him, and the black boy must be very smart."
" And what did my little darling do in school today?" a Chicago mother asked of her young sona " second grader."
" We had nature study, and it was my turn to bring a specimen," said Evan.
"That was nice. What did you do?"
" I brought a cockroach in a bottle, and I told teaclier we liad lots more, and if she wanted I could bring one every day."

This, too, should be taught to every child, that it is wicked to sloot any harmless animal-of the field, forest, or air-except for necessary food. It :s recognized that all animals which are a danger to human life should be clestroyed. In the days to come, the wanton destruction of amimal life for sport will be considered a savage custom, out of harmony with Christian principles.-W Western School Journal

## Sympathy for Children.

" I wish I had felt toward humanity in my early life as I do now," said a thought ful, middle-aged lady. "Particularly do I feel this concerning the years I was a teacher. I should have looked upon my work and the children from a different point of view."
Two or three primary teachers were near by and heard this very unusual remark.
" Do tell us just what you mean?" said a merry looking girl, evidently puzzled at the thought that pity for humanity had anything to do with teaching.
"Why, I mean just this," was the reply. "Here we are, a world of human beings, here from no wish or will of our own, compelled to bear all the ills of heredity, circumstances, and temperament, for which we are in no way responsible, in the beginning. I think a child burdened with the mistakes and shortcomngs of his ancestry, handicapped at every point by conditions for which he is no way responsible, is a pitiable object-enough to make the angels weep. Little children are not conscions of this, I know, but we who know life find this to be true, and it should stir all the compassion in onr hearts. We have lived long enough to know what it means to long for things that are just and right in themselves, and be denied them at every step by circumstances made for us before we existed. To look upon a school-room of poor children, or even middle class children, and know the life struggle that is before them, is enongly to stir onr profoundest pity. But why do I except the rich children? Opportunity stands at their door beekoning them on to the best things, but because necessity is absent they are blind to the beckoning hand, and sette into an inertuess that is worse for character than the hardest struggle. So here they are on every hand. Add to this the common lot of sorrow and disappointment, and mankind deserves and calls for the tenderest sympathy from each other."
"But what about the application of this to the teacher's work? That part of it appeals to me. We can't spend all our time with individual cases. and since we must consitler them in a lol. so to speak, how can we do differently from what we do: I'm sure I try to be conscientions and make them do right as well as I can."
". Make them do right?"." Y'es, that is just the trouble. What is "right:" We set up a stan:Iard of right for these little mortals in our care, and try to bend every one to it according to our idea-
and we never doubt we are right. How I nsed to rebel and feel injured when I was a teacher because these poor little igmorant beings didn't recognize and act up to my standards of dinty and right! Bless their hearts, they didn't know what I was talking about. We were in different worlds. And I dared to call their indifference to what I was saying, stolidity or depravity. What self-righteons people teachers are in their condemmation of their chidren! Why, as I look back, I think many of my children were too "born-tired," too half-sick, and perhaps too hungry to be able to understand my fine ethical distinctions. How many of them had come from homes where they had heard only cross words and fanlt-finding from the moment they opened their eyes int the morning? How many of their parents had married wrong and saturated the home atmosphere with discomfort. Many of those poor little sensitive, defranded tots may have known nothing in their home life but discord. Why should I have expected them to be keyed up to understand the moral harmonies I prescribed for them? We grown people wonld not stand the jangle one hour that losts of children are obliged to live in all the while; and then we wonder that they come to school " ont of tunc." And we proceed to put them in tune by giving them talks on morals, bunching then all up in a lut, when no two of them need the same treatment. We may call this doing our "duty "-what a stumbling block that word duty may be!"
"But there is a general code of morals accepted by everybody that must be taught, no matter what sort of children we have. You wouldn't condone a lie because a child came from a bad home, wonld you?':
"Condone it? Oh, no! But such a child is not (t) be weighed in the same balance as the well-born, well-trained child. The conditions back of the lie of the unfortunate child are to be considered before he is accused of committing an mupardonable sin. The sidelights need to be thrown on every case befure a teacher can decide justly or punish jnstly. But how can she get at the sidelights? you are gring to ask. Yes, there is the difficulty we must all acknowledge. But a great deal can be known from daily association with each child, if we looked closer, thought more about it, and pitied more. fint at the best teachers must wrope in the darkness as regards the imer life of their childem. But does not everybody move slewly and cantionsly in the dark? And does not 'everybody' inchude teachers in the school-room: "- P'rimary' Eiducation.

## Lines in Season.

A man of words and not of deeds
Is like a garden full of weeds.
Good words withont deeds are rushes and reeds.
He that woild live in peace and rest, Must hear and see and say the best.

In hope a king duth go to war;
In hupe a lover lives full long; In hope a merchant sails full far;

In liupe just men do suffer wrong.
In hupe the ploughman sows his seed:
Thus hope helps thousands at their need; Then faint not, heart, among the rest; Whatever chance, hope thou the best.

And now, when comes the calm, mild day, as still such days will come,
To call the squariel and the bee from ont their winter home;
When the sutnd of dropping nuts is heard, thongh all the trees are still,
And twinkle in the smoky light the waters of the mill,
The south wind searches for the flowers whose fragrance late he bore,
And sighs to find them in the wood and by the stream no more.
-W. C. Bryant.
Oh, many a sliaft, at random sent,
Finds mark, the archer little meant,
And many a word a: random spoken,
May soothe, or wound, a heart that's broken!
-Sir Walter Scott.
1 love to wander through the woodlands hoary In the soft light of an antumnal day,
When summer gathers up her robes of glory, And like a dream of beaty glides away.

> -Sarah Helen Whitman.

O sweet September, thy first breezes bring The dry leaf's rustle and the squirrel's langhter, The cool fresh air whence health and vigor spring, And promise of exceeding juy hercafter. -George Arnold.
The morrow was a bright September morn;
The earth was beantiful as if new-born; There was that nameless splendour everywhere, That wild exhilaration in the air, Which makes the passers in the eity street Congratulate each other as they meet. -Longrellon.
1, et ouch man think himent an act of God, llis mind a thenght, his iife a brew.th of God.
-Batle:
When wealt! is lusi, nothing is lust;
Whes healel is lust, sumething is lest;
Whens chaticter is los a all is lost?

- Alotho out the Wralts of a Sihnol in Gemas

When homonr comes to zon, be ready to ake :a:
lhat rathe not to seize it beture it is near.


Our greatest glory is, not in never falling, but in rising cvery ine we fall.

Success in most things depends on knowing how long it takes to succeed.

Perseverance is failing nineteen times and succeeding the twentieth.

> Do your best, your very best, And do it every day.
> l'll help you, you help me,
> Then what a helping world 'twill be.
> Politeness is to do and say
> The kindest thing in the kindest way.

Tis the golden gleam of an zutumn day
With the soft rain raining as if in play,
And the tender touch on everything
As if autumn remembered the days of spring.
The buds may blow and the fruit may grow,
And the autumn leaves drop crisp and sere;
But whether the sun, or the rain, or the snow,
There is ever a song somewhere, my dear.
-Riley.

## The Review's Question Box.

J. M. D.-Where can 1 get the best book treating on Reading and How to teach Reading? What is the cost of the books?

There are many excellent treatises on the subject. If you write to Nessrs. Ginn \& Company, publishers, Boston, they may put you into the way of getting what you desire.
M. A. H.-Would you kindly explain why the westerly winds blow from west to east. The geography gives no explanation ?

It is difficult to give an answer to your question without entering into a discussion of the canses and directions of winds, climatic conditions, etc. This we have not space for in this number. A good book on plysical geography, or Ferrel's " Popular Treatise on Winds," would supply the information. If you have not a book at hand, we would be glad to loan you one for a time.

## Exercise in Spelling.

Findanental, arrogance, conferred, combatant, strategy, citadel, ventilation, extravagant, menace, magazine, surgeon, aggressor. conspiracy, martyr, acquittal, penitentiary, achieveninent, compelling, crystallization, notable, parliamentary, flippant, emanate, alleged, paralyzing, adherence, management, liquefy, appellation. (alendar, musician, concert, fraudulent, acquiesce. wrapped, eccentric, laziness. prejudice, twenty-six, ostensible, regrettable, maintenance, warrant, equivalent, contagious, serviceable, predecessor, lieutenant, nugget, typical.

sergics de witte


H．AKON ROSE：


BARON゙ KOMC゙R．』


KOKORO＇I＇AにAIIILA

PEACE ENVOYS OF RUSSIA AND JAPAN．

## CURRENT EVENTS．

The bloody war between Japan and Russia， which began February 8th，1004，has been ended by what wil！1）：called the＂Peace of Pormmonth，＂the terms bein：practically agreed upm ．Iugust 2gth， 1905．after a conference which theatenet at any time to be broken up by the stublormese of Russia． Fortmately the intercession of laresident Ronsevelt and the humene disposition of victorinus Japan has prod：ced a reconciliation．in which the latter cometry has vieded some of her most important demands． These are：She witholraws her claim to all indemity or re－imbursement for the expenses of the war： also lier claim to the surrender of interned war ves－ sels，and the limitation of Russia＇s naval power in the Pacific：the island of Sagrialien to be divided between the fwo countries．Japan having the sontli－ ern and Russia the morthern half．Thus a war is ended in which Russia has lost much of her military prestige． 200,000 soldiers．\＄t，000，000 oron，her flect． and her so－called rights in the rich province of Manchuria．

The peace conference at Portsmouth，N．H．．has been an event of such interest as in deserve a place in the history of three mations－Rusciat and Japan， whose commissioners have there striven to bring into harmony the demands of their reepective gov－ ernments，and the［finted States．within whose terri－ tory this remarkable conference has iaken place． The envore were there at the insitation of the President of the Conited States，and were treated as guests of the feferal government．The negotia－ tions．which began on the oth of Anrust，seemed to have reached a deadlock ou the $1-\frac{1}{2}$ ，when the Russian envoys refused the Jamancse demand for an indemnity，and dectined to give up the warshipa interned in neutral ports．In nther matters an agreement was reached．Russia consenting in
acknowledge Japan＇s influence in Korea，to make over to Japari her lease of fort Xrthur and the surrounding territory，to evacuate Ahachuria and Sive up the larger part of the Chinese Eastern Rai！－ way，and，in short，to yield everything asked for by Japan before the outhreak of the war．At the conclusion of the ten lays，ending August 28th， Juring which President Ronsevelt was in frequent communication with the courts of St．Peters－ burg and Tokio，the amonncement was made that an agreement has been reached as given above． The task of framing the＂Treaty of Portamouth＂ is now going on，the representatives of both cota－ tries apparently acting in an anicable spirit，an： rejuicing at the prospects of peace．

Each of the combatants has sent a great states－ man as its plenipotentiary to the peace conference． （imut Witte，the senior member of the Russian commission，is a big．musculat and handsome man， whose light hair and fair skin make him look like at typical Norseman：while his mame betrays the fact that loe is of Dutch descent．Though of humble birth，he has risen to eminence by merit， ：and has held the offices of Finance Minister and President of the Commeil of the Empire，a Russian deliberative eomelil which somewhat resembles our senate．He has great influence with the populace． and is said to be the coming leader of the govern－ ment，if popular government is to be established in his mative land．As a peace commissinuer，his ap－ pointment was an assurance that the Russian gov－ crmment was sincercly desirent of peace，for he alvised a fricudly solution of the difficulties before the war began．The chief representative of fapan， Paron Komura，is a very small man，lark and silent and keen．He was one of the first of the youngr Japanese students when cance in Imerica in stuly，and was the first of his race to eraluate from the Itarvard Law Schonl．Itis life has been spent
in the service of the state, and he has held important positions in his country's service. As Foreign Minister, he was accused hy his countrymen of too great forbearance in dealing with the questions in dispute between Japan and Russia, but his critics now recognize that his coolness prevented a premature outbreak of hostilities, and are ready to trust him in negotiations for peace. Baron Rosen has an imperturbab!e face. A closely cropped set of whiskers hides his play of expression. He seems less troubled by his responsibilities than any other of the big four. Takahira looks more like a man of ability than any of the other Japanese. He is broad of build and has a massive head for a Japanese. The striking feature of his face is his eyes, which are like the searchlights of a battleship, maintaining a steady glare, which confuses the most expert questioner. He rarely smiles and appears always to be in deep thought.

The members of the Zeigler Arctic expedition which reached Franz Josef Land two years ago, have returned in the steamer sent to their relief; their own vessel, the " America," having been crushed $i_{11}$ the ice. Though ther did not reach the Pole, their leader, Anthony Fialia, claims that they have been successful in surveying the archipelago north of Asia and discovering four new channels.

The total eclipse of the sun, on Angust 3oth, will have been ohserved, if conditions were favorable, in Labrador, Spain, Tunis and Egypt. It is hoped that photograplis of the sun's corona, taken at Labrador and in Egypt, with an interval of two hours between the exposures, will be of great value in determining the nature of that mysterious phenomenon.

The four Russian battleships and two cruisers sunk at Port Arthur are found to be uninjured. They were sunk by the Russians pending the expecterl recovery of the command of the sea; and are now, under new names, to be added to the Japanese flect.

The visit of the Freneh fleet to Portsmouth, which has recently brought together the war ships of France and Great Pritain in token of international fricerclsip. following a similar visit of a Pritish flect to Brest. may have an mportant bearing upon worli politics-for a nary is not useless in times of peace. A great British fleet and a great French fleet lyiner side by side, or, as in this case. with the ships intermingled. shows not only to their own people, but to other nations, that their united force mav be called into action should occasion require. Two other movements of British ships may be looked upon as peaceful demonstrations of naval power. The chamel fleet is now on a visit to the Paltic: while a powerful syualron under Prince Lonis, of Battenburs, is now in Canadian waters, and will visit the Crited States.

The new provinces of Alberta and Saskatchewan will be inaugrurated on the first and fourth of this month, respectively. Hon. A. E. Forget, the pre-
sent governor of the Northwest Territories, becomes the first governor of Saskatchewan. and Hon. G. H. V. Bulyea first governor of Alberta.

The area of the two new provinces which ente: the Dominion in September: Alberta is the larger, having an area of 253,500 square miles, while Saskatchewan has 251,100 square miles. There are three provinces which contain greater areas: Pritish Columbia, the largest, with an area of 372,620 square miles; Quebee, 351,873 square miles: Ontario, 260,862 square miles. For the sake of comparison we give the area in square miles of the other provinces: Manitoba, 73.732; New Brunswick, 27.985; Nova Scotia, 21.428; Prince Edward Island, 2.184 .


The Tsak - Oh. William, William, our little game is up! see who's coming round the corner:-Weckly Irish Times.
Each of the new prorinces is nearly six times the size of New York or Pemmsylvania, five times as large as the State of Illinois, seven times as large as Indiana. The only state that exceeds them in size is Texas (208,242 square miles). Each is twice as large as England, Wales, Scotland. Ireland put together with their population of 42,000,000 people; each exceeds the German Empire with its population of nearly $57.000,000$, and its area 208,$73^{8}$ square miles, or France with $39,000,000$ people, and an area (Corsica included) of 204.092 square miles.

There are said to be ninety-six steamships in the world of more than ten thousand tons burthen. Oi these. Great Britain owns just one-half, Germany about one-fourth, the C'rited States one-eighth, and the others belong to Holland, France, Denmark and Belgium, in the order named,

Kairn Island, twenty-five miles south of Port Simpson, is said to have beell defmitely chosen as the site of Laurier City, the future western terminus of the Transcontinental railway:

The arbitration court which has been considering the amount of compensation to be given to France fishermenf for the loss of their former treaty rights on the shore of Newfommand has fixed that amount at $\$ 275,000$.

The govermment has selected the site for a new battery, to be erected on the shore of the St. Lawrence, below Qucbec. The fortification will be about five miles below the eity, and its guns will be of sufficient range to command the stream at that point.

Sable Island is now connected with the mainland by the Marconi witeless telegraph.

Official figures for the year ending the 3oth of June last show an increase of sixteen thonsand in the immigration to Canada as compared with the preceding year. The total for the year was nearly one hundred and fifty thonsand.

The residents on both sides of the boundary line have recently been celebrating the fiftieth anniversary of the opening of the "Soo" Canal, which connects Lake Superior with Lake Michigan, and is now the busiest canal in the world. The wht canal, originally made by the people of Nichigan, and the newer canal on the Canadian side of the Sault Ste. Marie, together carry nearly three times as much tommage as the Suez Canal.

Wonderfully rich mines of silver and colsalt have been discovered in the Temiskaming region, ant a large part of the territory on the som11 of Hudson Bay is believal to be rich in minerals.

A congress of delegates from the Rusian Zenstvos, or provincial representative assemblies, met at Moscow in the last week of July; and later at congress of peasants from many different parts of the empire met in the same city. Both these satherings expressed in strongest terms the dissatisfaction of the kussian people with the existing state of affairs, calling for the promised reforms in the system of exovermment. In imperial manifesto has since been issued, giving a definite plan and date for the election of a mational assembly : and Russia is at length to have representative government for the empire, as a whole as it now has in the provinces of European Russia. This as might be expecters. is for the present merely in the form of a consultative assembly, the emperor reserving harge powers to himself and his successors. The members of this parliament will he elected hy representative assemblies, much as the ['nited states senators are elected by the state legislatures: and the body may meet at times in secret session, as does the [nited States senate. instead of being open to the public like a British parliament. Elections will take place without delay. so that the first session may be held in January.

Harvesting has begin in the Northwest, and this year's crop is expected to yield nearly a hundred million bushels of wheat.

The Japanese language is now to be added to the regular courses of study in German foreign langrage scluols: and mumbers of stulents are said to be going from India to Japan to enter the muiversities.

The British Association for the Advancement of Science is now in Sonth Africa, where it will hold sessions at Victoria Falls and other points of interest.
The Zionist congress has dectined the offer of the British govermment of a tract of land in East Africa for colonization. The members of the comgress were divided on the question, but most of them hope to establish a colony in Palestine.

The negroes in the public schools of Cape Colony ontumber the whites. They have well traned mative teachers, and make rapid progress in their sturlies.

The bonndary between Abossinia and Pritish Somaliland. over which there was a long-standing dispute. has been settled ly a joint commission.

Germany's little war in Southwest Africa still continnes, though there is less apprelension of danger of its spreading beyond the bounds of Cerman territory.

Several navigators report the warm waters of the Gulf Stream to be nearer out coast than usual; and the unnswal damphess of our summer weather is by some attriluted to this cause.

Some of us who are no longer young may remember that it was the fashion years ago to speak of the electric fluid. Now again electricity is likened to water. An eminent anthority teaches that it is not a form of energy, like heat. but may be a vehicle of energy, like water. Electricity under strain constitutes a current and magnetisn: clectricity in vibrations constitutes light.

The growing revolt in Arabia is causing some measines to the statesmen of the nations most interested. including Great Britain. France and (iermans. The ihreatened deposition of the Su!tan of Turkey from his phace as the acknowledged leader of the Moslem woth change the centre of Noslem power. and affect other interests besides Hhose of the ()toman Empire.
 in respect to the military forces and plans of deFence, hat cansed the resignation of Lord (iurzon. (ionernmeliemeral of India. He is succeeted by Lam! Minta late dovernor-Cheneral of Camada.

A statue of lacepues (artior hats been meneled at Sit. Malo, France with imposing ceremonies, the government of Canala being represented on the oncasion by the presence of the solictor-general. The money reguited for the erection of this states of the famons navigator was collected in Canala.

The Maritime Board of Trade, at its recent session in Yarmouth, by a manimous resolution declared itself in favor of the union of the provinces of Nova Scotia, New Brunswick and Prince Edward Island. The board also favors the admission of the British West Indies to the Dominioth of Canala, and the butilding of a tumnel beneath the Northumberlan. 1 Strait to connect 1'rince Edward Island with the mainland.

By a vote almost unanimous, the people of Norway have demanded the separation of that kingdom from Sweden. Either Prince Charles of Sweden or Prince Charles of Demmark will probably be chosen as King of Norway.. The latter is a son-in-law of King Edward, and his selection would seem to bring England, Denmark and Norway into c'oser relations than have existed since the days of the sons of Cnut.

## SCHOOL AND COLLEGE.

Dr. W. H. Magee, recently principal of the Parrsboro, N. S., schools has been appointed principal of the Annapolis Royal Academy.
The Golden Jubilee of the founding of St. Xavier College, Antigonish, N. S., will be celebrated on Wednesday and Thursday, the 6th and 7 th of September.
The united institutes of the teachers of St. Joln and Charlotte counties will be held in St. John on the 12th and ${ }^{13 \text { thl }}$ of October. A programme will be given in the next month's Review.
Miss 1sabella J. Caie has been appointed principal of the Milford, St. John County school. Miss Cale has had a large experience in teaching, having had clarge of schools in Kent, Charlotte and St. Jolin counties.
Mr. Chas. L. Gesner, who has had charge of the school at Belleisle, Annapolis County, has been appointed principal of the Canning, N. S., school. He has been succeeded at Belleisle by Miss Hattie M. Clarke, recently of Bridgetown, N. S.

Mr. G. W. Dill, recently principal of the Lockeport, N. S., schools, has been appointed to a position in the St. John High Schuel.
Mr. Percy A. Fitzpatrick, A. B., of Westmorland County has been appointed principal of the Surrey Albert County Superior School.
The Mount Allison institutions at Sackville open in September. The excellent opportunities afforded by the Ladies' Academy are given in another page.
The annual meeting of the kent County Teachers' Institute will take place at Rextor, September i4th and isth. An excellemt frogramme has been arranged.
The Cape lireton Normal institute will meet during the last weck of September. Several days will be spent in teaching illatrative lessons by classes, and in practical addresses and discussions, as at Port Hawkesbury last September. The anecting will he hed at North Sydney.
Goon. Shephardoran, recently principal of the River Hehert, N. S., cheols, has resigned to take charge of the Mritland, Hant- County, schools.
Mis- Bessie .I. I rater, of Giatad Falls, N. 13, hats been apprinted teacher of grade -even in the grammar ochool, Chathe:tn.

The series of Royal readers used in the public schools of Nova Scotia since 1877 has been superseded by new book: published in part ly the Nelsons of Edinburg, and partly by G. N. Norang \& Company, Toronto. They are now ready for thse in the schools. The selection and editing of the material which forms the series was begun two years ago by the following committee: Supt. of Education Dr. A, H. NacKay (chairman), Supervisor A. McKay, Principal of Normal School D. Soloan, Inspector A. G. MrDonald, Principals Lay, Kempten and Butler, Prolessor Walter C. Murray, Rev. E. F. McCarthy. A series of readers in French is now being prepared, to be modilled after the English texts. These will not be ready until some time next year.
P. R. Alctean has resigned his position of princifal of the Richibucto grammar school, and has been appointed principal of the Sussex grammar school. George D. Stesle, of Sackville, will succeed Mr. McLean in R chibucto. Mr. Steele is a graduate of Mount Alli:on University.
The summer vacation school of manual training conducted by Supervisor T. B. Kiduer at Fredericton had an attendance of thirty-four students, and the results give promise of an increased interest in that important branch of education.
The leader in the University of New Brunswick matriculation examinations this year was W. C. Abercrombie, a pupil of the New Westminster, B. C., high school, of which Mr. H. A. Stramberg, B. A., formerly of New Brunswick, is the efficient principal. Frank A. McDonald, of the St. Jolm high school, led all the other students of New Brunswick, and is the winner of the St. John corporation gold medal awarded to the student making the highest average. One hundred and two candidates took the examination. Of these, ten passed in the first division, thirty-six in the second, twenty-three in the third, and twenty-three in the third conditionally, while ten failed. Those who passed in the first divi ion were: W. C. Abercrombie, New Westminster, B. C.; Frank A. McDonald, St. John grammar school ; J. J. Hayes Doone, Fredericton grammar school; Jean B. Barr, St. John grammar school; Beatrice Welling, Andover grammar school; Raymond L. Duark, New Westminster, B. C.; Frank E. Dickie, Moncton grammar school; Amie M. Henderson, St. John grammar school; Frank L. Orchard, Fredericton grammar school; Nlaud K. Smith, Woodstock grammar school.

Miss Carrie. E. Small, M. A., has been appointed viceprincipal of Acadia Seminary. She comes to her position with warm testimonials of her Christian character, advanced attainments and high culture. Her course through Wellesley College and Brown University was marked by the achievement of high honors. Which have been supplemented by extensive travel, and a short, but distinguished, carecr in teaching.
Professor Samuel W. Perrott has been appointed professor of civil engineering and dean of the engincering school in the University of New Brunswick, recently held by Professor Brydone-Jack. He is a graduate of distinction in arts and engincering of Trinity College, Dublin. and has had six years' experience in teaching and practical engincering work. Professor Perrott comes with many strong recommendations of efficiency, and the appointment is regarded as an excellent one.

Sir William MacDonald, Canada's educational benefactor, has given the sum of $\$ 20,000$ to provide means for enlarging Prince of Wales College, Charlottetown, P. E. I., and for teaching pedagogy, manual training, nature study, etc.
In the Nova Scutia provincial examinations, Miss Elsie Porter and Miss Jessie MeDougall of the Culchester County Academy made a record for the province in the " $B$ " Class, the former with a mark of 1077, the latter with 1047. The one thousand mark, says the "lruru Sun, lias been passed but once before, and that in the case of Mr. Gilbert Stairs of Halifax who made 1011 five years ago. Miss Porter has thus the credit of leading the pruvince.
Dr. John Brittain, who has had such a marked and successful career as teacher of science in New Brunswick, will again take up his work in the University of New Brunswick as teacher of chemistry. The excellence of his teaching and laboratory instruction there last year won the most favorable opinions from faculty and studens:, and the university showed its appreciation of his success by bestowing on him the degree of doctor of science.
Several changes have taken place in the staff of the St. John high school this year. Miss Katharine R. Partlett, who has been an exceptionally successful and earnest teacher in the higher educational work ior many years, has retired to take a course in nature study at the Guelph Institute, Ontario. Miss Mary E. Knowlton, whose genius in interpreting the masters of English literature has given her mure than a local reputation, has resigned after an unnsually successful career as teacher of literature in the St. John high school. Miss Knowlton has been appointed a lecturer in the Brooklyn Institute of Arts and Sciences, where she will deliver a six months' course of lectures during the coming winter.
Miss Bessie H. Wilson, teacher of grade eight in the St. John higli school, has been appointed to fill the place of $W \mathrm{~m}$. Brodie, A. M., resigned. as teacher of mathematics and Latin in grade eleven. Wiss Wilson is to be congratulated on an appointment won by her own merit and skill in teaching.
The Kings County, N. B., Teachers' Intitute will be held at Kingston, in the assembly hall of the consolidated school, on Thursday and Friday, September 7 th and Sth. A large attendance is expected.
It is expected that the new consolidated school at Riverside, Alhert County, N. B., will be opened September ith. Mr. Geo. J. Truentan will be the principal, with a staff of eight assuciate teachers.
Miss Yerxa, a former St. John teacher, now in South Africa, epent her holidays in making a vacation trip to the celebrated Vic:oria Falls, on the upper waters of the Nite. regarded as the greatest cataract in the world.
Mr. John Delong. A. B., has been appointed principal of the Mill:am, … P.. .elowens.
Miss Susie E. Archibale, Trurw, has been appointed teacher of domestic science in the Yarnouth sclownde, int place of Miss Starritt, who resigned to take a post-graduate course.
Mr. Jas. O. Stecve-, of Allert Comnty, has been appnin' ed principal of the Centreville. Carleton County, superior schon, with Mis- 1)rehard is the primary teacher.

## RECENT BOOKS.

[In a review last month of the "Artistic Crafts Series of Technical Handbouks" the name of the publisher, Mr. Joln Hogg, i3 Paternoster Row, London, E. C., was inadvertently omitted.]
Practical Mathematics. By Daniel A. Murray, Pla. D , Professor of Mathematics in Dalhousie College, Halifax, N. S. Cloth. Pages 1I3. T. C. Allen \& Co., Halitax, This is a compact neatly printed volume designed to bring practical problems early within the reach of young pupils. The work includes the solution of triangles, measurement of areas, heights and distances, the use of logarithme, plotting of graphs, and finding the slopes of curves ; with a dozen pages devoted to four-place tables of logarithms. The book brings within the range of high school and college students and those who leave schoon before completing their course a great variety of jractical problems which will widen their interests and increase their mathematical ability.
High School physical Science. Part t. Revised Edi tion. By F. W. Merchant, M. A., 1). Paed., Principal Londun, Ont., Normal School and C. Fessenden, M. A., Principal Cullegiate Institute, l'eterbow, Ont. Cloth. Pages 339. Tlie Copr, Clark Company, Turont).
The revision of this elementary treatise on physical science has added to its practical value by introducing several new leatures, among which are manual training exercises on the construction of apparatus required in the text. The book is very fully illustrated, the directions for laboratory practice definite, the experiments simple and such as can be performed by the pupils themselves with inexpensive apparatus. The authors have succeeded in giving an excellent practical treatise in which the fundamental principles of plysical science are very elearly explained.
Brothers of Perll: A Story of Uld Newfoundland. By Theodore Roberts, author of "Hemning the Adventurer." Cloth. Pages 327. Price \$1.50. Copp, Clark Company, Toronto.
The "brothers in peril" are an English hero and a yoming Boethic Indian of Newfoundland, whose race is now extinct. The scene is laid in the early days of that colony when it was merely a fishing station. The English hero with his Indian protege have many exciting adventuresfights with savages and pirates; hairbreadth cscapes: and there are love pas-ages intermingled. The descriptions are vivid. the action of the story strong and life-like, and the interest well sustained thronghout.
Istronoctory Phystology and hygiene. By A. P. Khimit. 11.A., M.D., Professor of Physiology in Quteen', Univervity, Kingston, Ont. Cloth. Pases xiv-Iパ. Cupp. Clark Company, Toront".
This is a series of simple lessons in physiolngy, the ar', jew bemg comisered as a part of nature stuly, and deveion... ed accordingly by demonstration and experiment. 1 ? Icwons were prepared and tatght to the firs four fur:m if the Kingetn putblic schools, and are pullithed as taugh They constitute an eisy graded methorl of parming lio ckments of physiology to a claw of children. and the means of preserving the health of the budy. The itl Wfoct- of stimulant-and nareotion are tankly in a com-
mun sense way, without lurid diagrams or repulsive language.
The Nature Study Course. By John Dearness, M. A., Vice-principal, London, Ont., Normal School. Cloth. Pages 206. Price 60 cents. The Copp, Clark Co., Toronto.
This book is admirable for its suggestiveness and the mamer of leading up to the many varieties of topics connected with rature study. The teacher who will give it a careful study and adapt its methods to his own needs cannot fail to be successful and produce a large measure of interest in the school. The plans of nature work in the schools of Nova Scotia, Ontario and Manitoba are quite fully drawn upon for material and illustrations, and the strong features of each course are fully emphasized. The author has appreciated the many difficulties in the path of the nature study teacher, and has given practical aid towards surmounting them.
'Mid the Thick Arrows. By Max Pemberton. Cloth.
Pages 395. Price $\$ 1.50$. Copp, Clark Co., Toronto.
A story in which there is plenty of action, no lack of intrigue, and a plot that is very skilfully woven.

Geo. N. Morang \& Company, Toronto, are the Canadian agents of a series of beautifnl little pocket editions of English and American classics published by the Nacmillan Company, New York. These are octavo volumes, prettily bound in red cloth, with the titles in white on the back and on the front cover. They are sold at the low rate of twenty-five cents each. We have received three volumes -Andersen's Fairy Tales, Longfellow's Hiawatha, and Hawthorne's Honse of the Seven Gables. The two latter are adorned with neat vignette portraits of the authors, and all are edited for use in elementary and secondary schools, with introductions and notes.

From the same publishers, Morang \& Co., Toronto, : copy of Chancellors Graded City Speller has been received. price 12 cents. It is adapted for seventh grade students. and is a useful little work, combining derivation, wordbuilding and quotations of literary value and interest in a very admirable way.
Natcre lessons for Primary Grades. By Miss Lida B. McMurry: Cloth. Pages 19r. Price 60 cents. New lork: the Macmillan Company; London, Macmillan Company; Toronto, Geo. N. Morang \& Company.
This book leads easily and naturally into the study of animal and plant life from objects, most of which are easily accessible to the children of every locality in Canada and the United States. About three-fourths of the book is taken up with subjects of the animal kingdom, many if which are houschold pets. The author's treatment of the-e will not only prove of great interest to young children, but lead then to be definite in observation, and kind and coniderate to animals. The plentiful sprinkling of explanatory purenthetical notes throughont the text is suggestive. if not wo liberal in the way of "helps."
lirom the same publishers (the Macmillans and Morang) there have been received A Special Methor in Language, (choth, page $1 y 2$. price 70 cents), covering the first eight grath of school work, designeel to link closely with langerge all other "xereines of the school to form a hroat and simple trearnent of the subject: and A Special Me:hool in Arinhmetic (choth, page 225 . price 75 cents), the plan of which is to outline to eementary teachers the
purpose of teaching arithmetic, and to show its relarion to other subjects in the course. The author of both works is Chas. A. McMurry, Ph. D.

Object Lessons in Elementary Science. Stage VI. By Vincent '. Murché. Cloth. Pages 325. Price 25. Macmillan \& Co., London.
This book is divided into four parts, the first treating, in a simple illustrative way, of the mechanical powers; the second of the ordinary chemical processes; the third of the structure and functions of the chief organs of the human body; and the fourth of the geographical distribution of certain plants and animals, their use to man, and the trade and commerce arising from them. The arrangement in this stage, as in the previous ones, is clear and methodical, no step being left unexplained.
Practical Experimental Science. By W. Mayhowe Heller, B. Sc. (Lond.), and Edwin G. Ingold. Cloth. Pages 220. Price 25. 6d. Blackie \& Son, London.
In this book we have the principles of scientific teaching very carefully illustrated; and the author places special stress on the importance of laying a foundation of real knowledge on which future progress may be securely built. To this end he weighs carefully the results of observation and experiment, the sifting of information from many sources, and the gathering of experience by skilfully directed methods. The measurement of length, area, volume, mass; of the weight and pressure of air; of temperature, expansion and kindred topics, are very fully treated, with abundant illustrations.

In "Blackie's English School Texts." edited by W. A, D. Rouse, Litt. D., there have been issued Charles Lamb's "Adventures of Ulysses" and "Sinbad the Sailor." Each is accompanied with a brief introduction, the pages are clear and in large type, which is a pleasure to the eye. Price 8d. each. Published by Blackie \& Son, London.
In " Blackie's Little French Classic Series," Blackie \& Son, London, there are two neat little pocket rolumes, containing an introduction, notes and vocabulary, price 6 d. each, Alexander Dunas's "Jacomo ou le Brigand," one of the rare short storics of that gifted author; and Mateo Falcone, which Walter Pater pronounces "the cruelest story ever written," by Prosper Mérimée.

In "Blackie's Latin Texts" there is begun a new series designed for students in the first two or three years study of Latin. Each volume, the first being Eutropius, price 8d., has a short introduction dealing with the author's life and works. A useful feature in the text is the marking of all vowels long by nature.
Other texts from Blackie \& Son are Longfellow's "Hiawatha." with copious notes and vocabulary, price is.; "Story Book Readers," fourth series, price 4 d ., containing Miss Cuthell's interesting story of a seaman's little boy and his adventures; "School Recitations." for senior pupils, price Id., with standard poems by the best authors.

Primary Readers. By Katharine E. Sloan. No. I. pages 151, price 25 cents; No. 2, pages 174, price 30 cents. The Jlamillan Company, New York; Geo. N. Morang \& Co., Toronto.
The ain of these primary readers is to teach children to read with the least labor and in the shortest time. The phonic methorl is the means used to secure this end, but the lessons are so arranged that the word or sentence



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method may take it place, or be used simultathentisly with it. The subject ma:ter is well elected, the colored plates and other engraving are for the mont part matural and attractive.
Studes in Moderi Germin hitek.tit rf., By (ofto Ifeller. Professor of the ferman Language and Literature in Washington University. Cloth. 30r age- Mailins price, $\$ 1.35$. Gimn \& Company: l'ostom.
The author has confined his Sterlies to Sudermanm, Hauptmann, and to the ferman women writers of the century. It is a timely contribution be prevelt day literature. The anthor limit his choice of stbjects with the avowed olject of directing attention to sertain aspects of modern German thouglat, rather than to make the volume a "guide-bouk to German literature." Ilic chapter on women-writers is especially interesting to Figlioh readere. Although Germany has produced 1 wo womitn writer comparable to England's George Eliot, or George Sand, ni France, the anthor emolurles a highly aporeciative diacussion of four women writers-lsolde Kur\%, (lara Viebig, Helene löhlaty, and Ricarda lluch-with the fronk admis sion that one cannot name the foremont living writer e of Germany without incituling severat women.

In the " belles-Lettren Serice." pmblinhed loy. I). (C. Ileath \& Company, bioston, reference to which ha- leern marle in other mumbers of the Revess, we have floree volume lately issued. One of these is Selecter Pame, by Vigermer
 Willian Horten layme, L.1. 1). The wectenc have berel made with excellemt julgment, and emistate prohap - lo best productions of the one ereat preet left wo the Finglis!
race, whose contemporaries have pased away. The two greatest of Swinburne's odes, "Athens" and "The Armata," are to be found in the "Selections." Two wolnmes belong to the English drama-linssy DAmbois and The Revenge of Bussy D'Ambois, loy George Chapman, cdited loy Frederick S. Boas; and Society and Caste, Ly 1 . IV. Ruhertson, edited by T . Rogar Pemberion. The attention of beok lovers and tibrarians is directed to this great work publinhed by Messts. Heath \& Co. The semeral motu of the series, which will inchude, when completed, smme fwo handred volmes, is "Literature for Literature's Sake." They should mect the approval and apprecistion of scholars. They are to embrace the best prodicte from the dawn of Fingli-h literature down to the present time
 Chatient. By C. R. Jackson and Mrs. L. S. Datugherty, State Normal School. Kirksville, No. Illustrated. foz pages. Cloth. Price $\$ 1.50$ net. Orange Juda Company, New York.
This bowk is designed to prepare teachers to give prac fical and definite agricultural instruction in public schools. The plan of presentation is original, ant any energetic teacher, by working out the theorite and experiments, may (l) everliahle cla-swork. It will aid the teacher in the 17: ture work of schools. Athough primarily intended for Her in echole, it is equally valuable th any one desiring hata, in at eacy amb plasing mamer, a general knm helere of cementory agriculture. It contains a large 11:phtur of engravings, and is printed in large, clear type (In hamkne heary paper, and is bomd in cloth.

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The favor with which the Principles of Argumentation has been received during the nine years that have elapsed since its publication has made a more comprehensive treatment desirable. The authors have made numerous additions and improvements, especially in the chapters on :lebate, refutation, analysis and persuasion. The treatment of the latter subject is fresl to text-books, and is so presented as to lave a bearing for courses not only in written argument, but also in oratory and debate. Exercises are given at the end of each chapter, and much illustrative material has been added throughont the book to secure a full and simple course on argumentation.

In the "English Literature for Secondary Schools" series, Dacmillan and Company, London, have published three additional volumes in linen linding, on good paper, with clear type. These will 1 c found very excellent for classroom use, each volume being provided with introduction and a few suggestive motes. The extracts from the different authors have becn made with care and judgment. The volumes are: Longfellow's Slorter Poems, edited by H. B. Cotterill, M. A., price is ; lessays from Addison, i; J. W. Fowler, M. A., price is.; The Tale of Troy, re-told in English by Aubrey Stewart, M. A., price is. 6d.

## RECENT MAGAZINES.

The August Allantic Monthly (Buston) is a fiction number of great interest, and the escays are upon timely topies and have all the readableness of storics. Although the number is largely devoted to fiction, it contains an excepfionally important and timely paper upon The Literature
of Exposure, by George W. Alger, whose terse diseassions of important contemporary issues have found so much favor with Atlantic readers.
The Atlantic for September has three very readable articles on Education, which with the discussion of other timely topics, several good stories, poems and literary essays make up a number excellent in its variety, ability and brightness.

The colored illustrations in the Canadian Magazine (Toronto) for August are especially good, as are the reproductions of Turner's pictures.. The fiction is exceptionally good, and every story is by a native writer. The whole number is full of interesting features.

The Canadian Magazine for September opens with an article from the pen of Mr. Justice Longley entitled Moral Heroism. There are several stories in the number, written by Canadians one of the best of which is The Other Miss Rolsbins, by Isabel E. Mackay.

The most notable review article on Sweden and Norway is Scandinavia in the Scales of the Future found in the Living Agc (Boston) for August 5th. British Foreign Policy, and Birds and Beauties of an Old Orchard are articles which will interest the reader in the number for August 12th, and in the mumber for August 19th we have the inspiration of a good example in the sketch entitled My First Success.

The Chautauquan for August is principally taken with studics of questions in the Far East, and there are articles of great interest to the student and general reader on Korea, the Russo-Japanese War, and Highways and Byways, which take in the current events of the world.

Thic Chautauquan for September has a series of articles on the Russo-Japanese situation, in addition to discussions of other Oriental questions and contributions of current interest

The earliest creations of autumn are attractively set forth in the September Delineator, along with fashion comment and prophecies, and there is much in the numbar of interest from other than the standpoint of fashion. Mrs. Mary Hinman Abel contributes an article on the pure food question. The hymn, Nearer, My God, to Thee, is the subject of a paper by Allan Sutherland, and there is an cnjoyable travel sketch, describing and picturing the leantiful lake district in England. In the way of fiction the number contains some readable stories, and there are also entertaining pastimes for children, including an animal fairy tale by L. Frank Baum.

# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

| Published Monthly. | ST. JOHN, N. B., OCTOBER, 1905. | \$1.00 Per Year. |
| :---: | :---: | :---: |
| G. U. HAY, Editor for New Brunewick. |  | A. McKAY, <br> Editor for Nova Scotia. |

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Is the very full article contributed in this number on the Nelson centenary, by Miss Rohinson, our readers will find material for a review of the stirring events of one hundred years ago.

Mucui is said about the importance of punctuality in pupils attending schools. Teachers should set a good public example in being prompt to the minute while attending the session of an institute.

Subscribers of the Review should examine the numbers on their addresses. Number 220 means that the subscription is paid to October I, 1905. If the figures are less, it shows that they are in arrears; if greater, that they are paid in advance; number 232 means that they are paid to October 1 , 1906.

Next month, or the following, the Review will begin the publication of a series of pictures, reproductions of the world's best artists. The design is to furnish material for decoration of schoolrooms, aids to composition and the study of history, geography and other subjects. The pictures will be accompanied by instructions showing how to use them to the best advantage.

IN Mr. Butler's notes on the " Deserted Village " in this number, our readers will find his treatment of the subject applicable to any selection of literature they are preparing for classes; and so will the teachers of primary and intermediate work, who: if not qualifying themselves for high school positions, are fitting themselves to become better teachers by the careful study of the best English literature.

THF: attention of teachers is directed to the announcement of the courses of mantual training at Fredericton. The demand for teachers of manual training and houschold science is growing steadily. Under the regulations for consolidated schools in New Brunswick, these two branches must be taught if the special govermment grant is to be carncd by the district. Mannal training is also increasing in popularity in the towns of the provinec, and two, if $110 t$ more, teachers have been borrowed from Heighbring provinces to fill the demand for qualifred instructors. The New Brunswick director, Mir. Kirlner, says that the short course which began in September is full, but applications for the January to ! une course are invited.

A fine coloured picture of the death of Nelson can be obtained from the Messrs. Steinberger, Hendry \& Company, Toronto. Price \$2.

In the teachers' pension scheme recommended for Nova Scotia, it is proposed to form a fund from the following sources: Teachers whose salaries do not exceed $\$ 300$ shall contribute one per cent ; those who receive more than $\$ 300$ and not more than $\$ 800$, two per cent ; and those who receive more than $\$ 800$, three per cent. In addition, there will be interest ,on the permanent fund, and the government of Nova Scotia is expected to contribute $\$ 2,000$ a year.

A national conference of trustees of American colleges and universities will be held at the University of Illinois, Urbana, Illinois, begnning Tuesday, October 17th, during the week in which Dr. Edmund J. James will be formally inaugurated as president of that university. Some important questions will be discussed regarding college administration, which in the United States is managed by boards of trustees composed of non-experts, that is to say, by laymen interested in, but not engaged in, professional educational work. While this method of control is regarded as satisfactory by some, by others it is held to be a serious weakness to the system of higher education. In England thee old universities are self-governing bodies, controlled largely by the faculties; in France and Germany they are departments of the government, and so far as they are not directly under the control of the government, they are autonomous, that is, ruled by the faculties.

## Nature Study in Canada.

$1_{\text {ri }}$ an article on Nature-study in the Schools of No.a Scotia, published recently in the Ottazera Naturalist and later in the Nature-Study Review, of New York, Dr. A. H. MacKay gives an interesting summary of the growth of the nature-study idea in Eastern Canada, begiming with the presentation, a quarter of a century ago, of an outline of a nature course for the schools of Nova Scotia. At the instance of Dr. Allison, superintendent of schools, Dr. MacKay, then principal of the public schools and the historic academy of Pictou, laid before the N. S. Educational Association on the i4th July, 1880, the outline of a course which, after discussion and revision, soon after became a part of the pre-
scribed course of the first eight grades of the Nova Scotia schools.

Early in 1887 three teachers representing the provinces of Nova Scotia, New Brunswick and Prince Edward Island met at Pictou on the invitation of Principal MacKay, and the result was the founding of a journal, whose primary object was to foster the nature study idea. Quoting the words of Dr. MacKay:
In 1887 The Educational Review, which has ever since been continuously published at St. John, N. B., was started witla the object of developing the nature-study side of the course, as well as serving incidentally as a teachers' organ for the Atlantic Provinces of Canada. Illustrated lessons on natural objects were prepared, the most continuous being the series under the title "Ferndale School." The whole environment of common-school life was more or less covered, instruction for teachers on various subjects, including even the evening sky, which was illustrated by a series of star maps. The Ferndale series dealt with the biological side mainly; but other papers covered mineralogy, physical phenomena of common range, and so forth, before any similar effort appears to have been made in any other province of Canada.

Dr. MacKay then traces the growth of naturestudy in connection with the normal school of Nova Scotia, and the appropriations of Sir William Macdonald at Guelph, Ontario, to provide suitable instruction for teachers of nature-study throughout Canada. He also alludes incidentally to the work carried on by the teachers and schools in his own province, where such observations are made as the first flowering. leafing and fruiting of plants; the migration of birds; thunderstorms, frosts, high and low water, etc. These have been taken so regularly and proved of such utility that many schools elsewhere, from Nova Scotia to British Columbia, have adopted the same plan; with results that promise to become increasingly useful.

The "Ferndale Series," referred to above, was the contribution to the Review of Dr. MacKay, and he has been asked to revise that suggestive series, bring it up to date and publish it in pamphlet form with other related matter. Such a guide to nature study would be invaluable to the teacher, and it is hoped that Dr. MacKay may find time to elaborate his early work.

The Boston Trazeller thinks that the hen whose egg product is valued at $\$ 280,000,000$ yearly is more desirable as a national bird than the lordly cagle, which causes loss rather than gain to the country. The suggestion is practical, if it is not sentimental.

## Summer Holiday Activities.

In his evening talk before the summer school of science at Yarmouth in July last, Principal Soloan, of the Nova Scotia normal school, outlined an attractive course by which boys and girls may make the sunmer holidays a source of unending delight and benefit to themselves. In his wild garden at Lake Annis, Mr. Soloan occupies much of his leisure vacation monents, when books and correspondence and the calls of teachers' conventions will allow him, in the study of nature which is lavish and in great variety about him. It was in congenial mood, then, that he spoke of the opportunities of healthy enjoyment that lie open to children in vacation, and he has yielded to the request of the Reriew to place these views before a wider circle of teachers.

To enjoy a vacation and yct make it useful is Mr. Soloan's plea, and teachers will readily enter into sympathy with it on account of its possibilities to themselves and to their pupils. All through the school term there is too little time to read the storics or books that lend interest to literature, history. geography and other school studies; references are constantly being made through the winter months to objects of nature-study, such as are seen in field, forest and garden, to birds, insects and plants, which may be observed only in the mid-summer months. How good it will be then to anticipate the joys of coming vacation and have boys and girls jot down in their note-books what may be read as a supplement to present lessons, or what may be observed in their rambles afield in summer. It is hoped that Mr. Soloan's idea given below may meet with the cordial sympathy and co-operation of our readers:

Is it not worth while to consider whether the sum-mer-holiday activitics of the schoolboy and schoolgirl could be availed of to such a degree as to render them a direct asset of the school busincss withont therehy impeaching the rights of youth to untrammeled enjoyment of holiday blessings?

That a boy's holidays are a period of intellectual sleep would be a most thoughtless conclusion. True it is that during such periods certain activities called into daily recpuisition in the classroom cease to be operative; but, on the other hand, with the advent of summer frectom, various other mental processes wake to unwonted activity. Like those of older people, the schoolboy's pleasures are in the main intellectual: his rambles, his games, his masgueratings, quite as much so as our own. Let us admit, then, as we readily can, that formative influences
are potent in the mind and heart of the pupil whether school keeps or not.

It remains, then, to inquire whether these influences can to any extent be regulated, modified, or, indeed, supplied by the teacher after school has closed. The faculty of observation, for example, -this is ever lively in youth. And could not young persons' holiday observations be given point, rendered more exact and more permanently available if some general instruction, encouragement and aim were supplied in advance by the teacher?

I shall not try to claborate the theme very much. Consider, however, the whole realm of school studies, and the thoughtful teacher will hardly discover one subject treated in the schoolroom that does not lend itself to independent out-door treatment by the pupil-independent, or, better, slightly ..dependent on presuggestion and advice of the teacher. It is nature-study? Think how manifold and full are the processes of mature during the six weeks following the closing of school. It is the fruition period for what was but flower or bud in the fresh spring days of May and June; the hail and farewell periol for many of our birds of passage; the nest-ing-time of others; and the season when not only flower and bird workd, but the insect world, too, is at its gayest. The very heyday of nature! And, in the midst of the blaze of summer glory at which the coldest hearts are lighted to warmth and joy, our young folk are storing up an enthusiasm which can be transformed into an active principle in the nature work for weeks and months afterward.
The specific problem for the teacher is, first, how he may direct and encourage the holiday efforts of boys and girls to enjoy and to know nature's moods and processes; sccondly, how this acquired knowledge and cnjoyment can be enlarged and correlated by sulseequent recall and conversation after holidays are over. Let me suggest. What boy or girl will deem it drudgery or an inroad into holiday freedom to be asked to acquaint himself thoroughly, during the idle summer dlays, with the life and habits of some species of bird or insect, or with some group of plant-phenomena? Suppose a few young people bring back to school the store of definite information which the teacher has before holidays shown to be easily and pleasurably obtained,-what themes there for talks with these eager lads and lasses whose reports on various heads lack none of the charm of new discoveries! How keenly idle notes will regret their aimless and frnitless days, and will take a lesson for future application!

Nature-study aims at learning nature-processes in their continuity and in their manifold relations. ;This is largely where the school garden gets its value as a medum of instruction and education. But a school-garden is not indispensable. Only see to it that the summer vacation is not a lacuna, something dropped completely out of the school year, leaving direct observation restricted to spring and autumn phenomena, which will remain largely meaningless apart from their summer context.

Leaving for the nonce the volume of nature for that of the printer, perhaps we may even to some purpose direct the reading of our pupils in history, romance, or travel, by encouraging them to seek points of contact between their holiday reading in these subjects and the history and geography of the school. Geography furnishes a delightful field of study to young people given to the pastimes of fishing, berrying and picnicking. An illimitable range of concrete phenomena presents itself; and the teacher need only to give the cue through suggesting, for example, the making of a map of certain localities showing such features as drainage, flora, division into arable, pasture and woodland, lakes or ponds (the latter features quite within the power of older pupils to survey and plot in detail).
Not only our pupils, but ourselves, will be gainers by this effort to interpret life's mysteries as significant and interrelated, items which to the careless glance may have seemed distinct and separate falling into place in that large and unified plan which we designate by such vague terms as nature or universe.

We often expect too much of the new pupil. We forget that our suggestions which are clearly understood by the old pupils are as Greek to the new ones. We must go slowly at first, take nothing for granted, encourage the timid ones and establish the at-home feeling as soon as possible. We cammot stucly the individual too thoronghly-his habits, his capacity to work, his power of attention and concentration. We sometimes expect the in-coming pupil to know as much as the out-going. We try to remember what the last year pupil knew when he entered this gradc. That knowledge would be of very little practical bencfit to us. We have a new soul to deal with. Before we can devclop that soul we must understand it. Then by presenting the points clearly and simply, the flood-gates will open and the overilow of glatness will more than repay us for our efforts.-Scl.

## Visiting Schools.

When a visitor goes into a schoolroom and finds teacher and scholars, after a greeting which puts him at his ease, cager to resume the work thus interrupted, he concludes that the teaching is a vital thing in that school. If the visitor is a first consideration and the lesson a secondary matter, it shows that something is lacking. Every visitor appreciates a courteous reception, and, if he has interest enough in the school to remain for a time, is doubly appreciative of a bit of good teaching on receptive young people.

Whilc visiting the Victoria, B. C., school recently, the superintendent took me into the English literature room, where a class was studying Shakespeare's " Merchant of Venice." The poise of body and interested looks of each pupil showed that something was a-doing. Teacher and pupil paused to give the visitor a cordial greeting. The superintendent introduced him to the bright lady teacher in eharge who was " from the Atlantic Provinces a few years ago "-a not uncommon form of introduction in the West.
" Would yout like to stay and see some of our work?" said the teacher pleasantly.
." That is what would please me most of all."
Then some pupils were called upon to read short passages; others read extracts from essays written on the characters of the play. Comment was freely made by the pupils on the passages read or on the cssays.
"Would you like to say something to the school?" said the teacher as the visitor rose to depart.

That was an easy matter, as the visitor could say something to the point without being commonplace.

Forthwith the superintendent ushered his visitor into a grade preparing for the high school. Tlis also was presided over by a lady teacher "from the Atlantic Provinces." Nothing could exceed the beauty of the interior of this room. The walls were decorated with pictures, flags and mottoes, not too many, but just enough to make the effect most pleasing to the eye, and this effect was heightened by the banks of ferns and flowers (then, early May, in profusion in British Columbia) on the table and in the corners of the room. But there was nothing-a-doing in that school. The visitor was called upon to make the inevitable speech. He can only recall now that he stumbled through some nothings about pretty schoolroons, - and felt relieved when he found himself again in the open air.

A few days ago a half hour was spent in Fred-











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## A Warning Note from the West.

We have the following letter from Inspector W. S. Carter with permission to publish, which we gladly do, asking for it a careful reading:

Edmonds, Washington, U. S.,
September 12, 1905.
W. S. Carter, Esq.

Dear Sir, - * * * * You are now, probalby, just heginning your visits among the Charlotte County schools. Tiell the teachers not to be misled by the wonderful tales of high salaries in the "Golden West.' In the city schools very good salaries are paid, but it costs much more to live here than in New Brunswick. Besides, the teachers are paid so much per month-the school year varies here, but is never more than mine months. There is no supplemeatary allowance from the state; and nutil a life certificate has been obtained the examinations are a tax upon an income, as one must go to the county seat for the ordinary and to the state capital for the "life" certificate examinations. Then, attendance at comnty institutes is compulsory. Every teacher must attend the sessions of the institute or have his centificate cancelled, unless excused by county superintendent on account of ilhess. Even if not teaching, one must attend, and fares are not reduced.

I think there are very few (if any) New Brunswick teachers who wonld be willing to teach the sehool history -even for many times the salary paid. In the primary grades one avoids that, but it is quite difficult to have a number of pupils who know not one word of English until they come to school. Besides all this, the sehools are harder to manage, and the resnlts obtained out of all proportion to the amount of effort on the part of the teacher. Our schools in the East are much more thorough and efficient, our teachers a much finer class of people. I have attended the institute in two of the leading comnties in this state, and met many teachers from two other combties, and this is my candid opmion. Let the teachers impress upon the minds of even the youngest pupils that there is no country with such a glorious history as the one of which we Canadians form a part-no flag that means so much as ours. Prosperity, safety and the truest liberty are found in its shadow, as nowhere else on earth.

Every country must have some drawhack, and so Canada has quite severe winters, but they are not by any means an mmixed evil. When 1 see what Canadians are duing to-day to build up a rival mation at the expense of their own, I feel like starting out to preach a crusade-beginning at the schools.

Let every schoos have a small flag., which one of the children canshold up in view of all the ohters, and let them all sallute the flag as part of the opening exercises. This may seem a smal! thing, but it will tell in after life.

Pardon me for intruting tupon four time, but this subject is very near my heart, and I know you are the best one to bring the matter before the teacheri uf Charlotte County. Sinecrely yours,

Eda Ru'ssithl.
"Your paper wat invaluable to me during my last year's work. I wish you cery success.-N. C.

## October Talks,

The clear cvenings of October give a good chance to study the skies, which are now full of interesting things. The bright star that rises in the east before nine o'clock is Jupiter. Notice that it rises earlier each evening. Explain this. The sun rises later cach morning and sets earlier each evening. Explain. The reddish star in the west that sets abont nine o'clock in the evening about the first of the month is Mars. Above it to the left is another red star, which is called Antares, which means the Rival of Mars. It is a fixed star in the constellation of the Scorpion. At present it is brighter than Mars; sometimes the latter is the brighter. Can you find out why? Venus is now morning star and very bright. The large yellowish star that comes to the meridian about nine o'clock in the evening, following the sun's course, is the planet Saturn. It is now a very interesting object to look at through the tclescope, as its rings are visible.

Have a short interesting talk on the year as a whole, including the months and seasons, telling some characteristics of each. What is the meaning of October? Is it the cighth month? How many months cone before and how many after it in the year? What are the farmers doing this month? What crops are all in the barn or cellar? What fruits are now ripe? Name all the fruits that grow in this country? What changes are noticed in the weather? What colors are scen in the leaves of trees? in flowers? Do you notice any buds on the branches and twigs of trees? Do these stay on all winter? What will they become next spring? Notice that the brooks are fuller than in September. Why? What birds are with us this month? What ones have gone? Where? When will they return? There are few insects on the wing; what has become of them? (They are burrowing in the ground in old stumps, on trees and elsewhere. Look for cocoons, for "willow cones," swellings on the golden-rod, etc).

When is Hallowe'en? What children's games may be practised that evening?

Thanksgiving Day this year is October 26th. Explain the significance of the day, and why we should be thankful. Speak of the great extent of Canada, the wonderful wheat harvest in the Northwest, exceeding $100.000,000$ bushels. the greatest in our history. Is this all needed for home consumption? Where is the surplus sent? Should Thanksgiving Day be entircly given up to feasting? Teach thankfulness. Call attention to the many
reasons why we should be thankful, and to the benefit to ourselves when we appreciate the many good things we receive from the Crcator. Clay modelling of fruits, such as apples, plums, small pumpkins and squashes, etc., is a good exercise and appropriate to the season. Select from books and past numbers of the Review poems and stories on Thanksgiving.

In thirty-one Bavarian towns there are government agricultural institutions where from November to March, when they are not in the fields, the farmers for a nominal fee attend the schools of soil cultivation and fertilization, crop succession. stock raising, rudimentary bookkcepng, etc. Then in the spring the teachers go through the conntry advising the farmers on conducting and improving their farms, forming co-operative clubs and lecturing on scientfic and practical subjects. This is entirely free, the state assuming all expenses, and the results are said to be excellent.-Consular Rcports.

Exercise in Speling. - Notable, vengeance. guttural, sergeant, paralysis. comedian. peaceable. irrelevant, dynamite, installation, conceding. atrocious, bencfitted, aspirant, remmant, leprosy, collapse. besieged, courtesy, malfeasance, battalion, holiday. gascous, codicil, substantial, chattel, alleged, bigamy, weapon, scythe, imperative, collision, tenement, magician, censorship, precede, lientenant, comtagions, vigil, warrant, villain. controversy, incessant, illegal, pigeon, prejudicial, malady, pareel, civilian, imnocent.

## October in Canadian History.

It was on the 12 th Octoler, $1+1$ 2, that Cohmbus discovered America.

October 5, 1813. Iroctor defeated at Moraviantown by U. S. forces.

October 5, $186 x$. The great Saxby gate.
October, 1871. Fenian raid in Manitola.
October 10, 1864. Confederation conference at Quebec.

October 13, 18:2. Battle of Qucenston 1heights.
October 13, 1820. Sir William Dawson, the eminent Canadian scientist, born at Picton.
October 21, 1871. Boundary line settled between British Columbia and Linited States, and the island of San Juan awarded to latter conntry.

October 26, 1813. DeSalaberry defeated the U . S. forces under Gen. 1lampton.

October 30, 1899. Departure of first Canadian contingent from Quebec.

## The OId School.

When the last long line has passed from sight, And the footsteps ceho away,
I often sit at my desk and muse Alone at the close of the day;
And 1 think of the children of other years, Who, under my loving rule,
llave morn and night passed in and ont The halls of the dear old school.
And oft, in the short December days, As I sit in the quiet room,
When all of the children are gone away, Young faces preople the gloom;
Right there is the seat where Roy once sat. Who went in the fragrant Junc;
1 laid a rose on his heart and wept That Roy should be called so soon.
And there in the self-same row sat Clare Of the brown and serious eyes;
They tell me an honored name has Clare. In her home neath southern skies; And here sat Guy, of the radiant face, Oh, the tears will fall, 1 own.
When 1 think of Guy, our soldier boy, Whe died in the far Luzon.

Alh. sweet and sad the memories That cling to the dear old room,
And oft my pen forgets to move
As I sit in the early gloom;
And I bless the chiderem, one and all, Who, under my loving rule.
llave morn and night passed in and out The doors of the dear old selool. -Carric Shaze Rice.

## A Poem You Ought to Know.

Of all the meal you can buy for money, Give me a meal of breald and honey!

A table of grass in the open air,
A green bank for an casy chair:
The table cloth inwrought with bowers, And a grassomper cleck to tick the hours.
between the contses birds to sing
To many a hidden shiming string.
And neither man nor maid be seen
But a great company of green.
L'pon a humdred thousand talks.
Talk to nes its great green talks.
And when the merry meal is donse.
Pos hoiter wesiward with the sum.
1)ipping fingets cre we go
fo the strean that rons below.
Of all the meals you can buy for momey,
Give me a meal of bread and honey.

- Richurd Le Gallicme.



## Nelson and the Centenary of Trafalgar.

By Eleanor Robinson.
"Thine island loves thee well, thou famous man, The greatest sailor since the world began."
These words of the Poet Laureate are no poetical exaggeration. It is the simple truth to say that Nelson stands first in his profession. Who is the greatest soldier, statesman-poet-that ever lived? We might set many different answers to these questions. But the curestion, "Who is the greatest of sailors?" one name comes from the lips of all. And this great man came in time to meet one of the greatest needs of his country, and to save her from one of the most terrible dangers by which she was ever threatened. Octolker 21st, 1805, the day whose centenary we celebrate this month, was the day of a great deliverance. It was the object of the Emperor Napoleon to invade England : his army of 150,000 men was ready, lout the success of the invasion depended on the French fleet getting control of the Strait of Dover. Through nearly all the summer of 1805 the people of Great Britain were in "bitter suspense and widespread panic." Then in November came the news that the naval power of France had been broken at Trafalgar. With the sense of relief, and pride at the glory of the victory, came the grief at the loss the country had sustained. "England has lad many heroes,"
says Southey, "but never one who so entirely possessed the love of his fellow-countrymen as Nelson.

Horatio Nelson, son of Edmund Nelson, rector of Burnham Thorpe in Norfolk, was born at Burnham Thorpe on the 29th of September. 1758, and was the sixth in a family of eleven children. Several anecdotes are told of his comrage and independence, and one that shows his sense of honour and perseverance. As he and a brother were on their way to school one stormy day, they fomnd it so hard to get on that they returned home and told their father that it was impossible for them to reach the school. Their father replied, "If that be so, I have, of course, nothing to say; but I wish you to try again, and I leave it to your honour not to turn back, unless it is necessary." On the second trial, the elder brother wanted to give up again, but Horatio held out, repeating," Remember, it was left to our honour," and the journey was accomplished.

The story is that when only twelve years old, and a very delicate boy, he asked his uncle. Captain Maurice Suckling, to take him to sea, in order to relicve lis father of the support of one of his large family. "What has poor little Horatio done?" cried the mucle, " that he, being so weak, should be sent to rough it at sea. But let him come, and if a
cannon ball takes off his head, he will at least be provided for." A midshipman in those days did indeed have to rough it, for in the Royal navy the food was bad and the discipline harsh, even crucl. From his uncle's ship, the "Raisonnable," Horatio was transferred to the "Triumph," and was sent from there on a voyage to the West Indies in a merchant ship. "From this voyage," he says, "I returned a practical seaman, with a horror of the Royal navy upon me. **** It was many weeks before I got the least reconciled to a mar-of-war, so deep was the prejudice rooted. However, as my ambition was to be a seaman, it was always held out as a reward, that if I attended well to my navigation, I should go in the cutter and decked long-boat, which was attached to the commanding officer's ship at Chatham. Thus by degrees I became a good pilot, and confident of myself among rocks and sands, which has many times been of great - comfort to me."

In April, 1773, he was allowed, at his own carnest entreaty, to go as captain's coxswain on an expedition to the North Pole, and on his return, in October, he was appointed to the frigate "Seahorse." In 1776 he passed his examination and was made lieutenant; in 1778, when only just twenty, he was promoted to be commander, and in six months was appointed captain, of the "Hinchinbroke," a French prize. Meantime he had served two years in the East Indies, and also at Gibraltar and Jamaica. As captain of the "Hinchinbroke," lte had command of an expedition against liort San Jtran, in Nicaragua, where he distinguished himself by his zeal and courage. "Ile was the first on every service whether by day or night." But his health, already injured in the East Indics, now broke down, and he was invalided home. The next year he was well enough to take command of the " Albemarle," a twenty-eight gun frigate. and in her he made voyages to the baltic, and to Newfoundland and Qucbec. From the latter place he wrote: "Health, that greatest of blessings, is what I never truly enjoyed until I saw fair Canada." From Quebec he went to New York, where he met Lord Hood, who was then in command of the West lndian flect. Lord $H$ sexd has a very high opinion of the young captain, and introduced him to I'rince William, afterwards William 11. with words of commendation. The l'rince said many years later of this meceting:
He (Nelson) appeared to be the merest loy of a captain I ever beheld; and his dress was worthy of attention. He
had on a full-laced uniform; his lank, unpowdered hair was tied in a stiff Hessian tail, of an extraordinary length; the old-fashioned flaps of his waistcoat added to the general quaimtness of his figure, and produced an appearance which particularly attracted my notice; for I had never seen anything like it before. There was something irresistibly pleasing in his address and conversation, and an entliusiasm in speaking on professional subjects that showed he was no common being. . . . He lad the honour of the King's service and the independence of the British navy particnlarly at heart; and his mind glowed with this idea as much when he was simply captain of the "Albemarle," and had obtained none of the honours of his country, as when he was afterwards decorated with so much well-carned distinction.

After this Nelson served in the West Indies in command of the "Borcas," and was married at Nevis. In 1787 his ship was paid off, and for nearly five years he and his wife lived at Burnham Thorpe. There he read and studied and improved his education, but constantly wishing for active employment, and at last, in 1893 , when war with france was threatening, he was given the command of the "Agamemmon," a sixty-four gun ship.

The time of apprenticeship of small commands and of forced inactivity was over, and now, at thirty-four, Nelson wat entering upon his real war service, where all his devotion to his country, his zeal and ability, and all that he had learned in persevering practice in his profession, were to be called upon and put to the test.

The first great battle in which Nelson took part was the action fonglit off Capt St. Vincent, on St. Valentine's Day, 1897, when fifteen British ships, under Sir John Jervis, defeated the Spanish fleet of twenty-seven. Nelson, to duote the Admiral's words, "contributed very much to the honour of the day." He did this in two ways; by planning the manner of attack, and by conspicuous valour: During the action his ship, the " ("aptain," a seventy-four-gun ship, hat so much of her rigging shot away that she was practically disabled; she was alongside the "San Nicolas," an eighty-four-gun Spanish ship, on whose other side lay the "San Josef," carrying 112 gruns. Roth the Spanish ships had suffered severely; Melsom boarded the "San Wicolas" and received her strrenter; the "San Josef" opened a small-arm fire upon the boarders. but shortly a Sumish officer put his heal over the rail anel said they surrentered. "And on the quarter-deck of a Spanish first-rate," wrote Nelson, "extravagant as the story may sectil, did I receive the swords of ranquisher spaniards. Which as 1 received I gave to Wiflian Tearney, one of my
bargemen, who put them with the greatest sangfroid under his arm." The story of this exploit caught the popular fancy, and Nelson at unce became a heto in the eyes of the English people. For this victory Admiral Jervis was made Lord St. Vincent, and many honours were conferred on Nelson, the King making him a Knight of the Bath. At this time he was promoted to be rear-admiral.

Some of Neison's finest characteristics are shown in the story of the unsuccessful attack on Santa Cruz in July, 1797. The first attempt, under Troubridge, failed, and Nelson wrote: "Although I felt the second attack a forlom hope, yet the honour of our country called for the attack and that I should command it. I never expected to return." He was struck by a grapeshot in the right elbow, as, with sword drawn, he was stepping ashore. Faint and bleeding, but clinging with his left hand to his sword, which had belonged to his uncle, Capt. Suckling, he was got back into the boat, to be conveyed to his ship, but at this moment the cutter "Fox". was sunk by a shot, and the Atmiral insisted on waiting to see to the saving of the men. On being rowed to the nearest ship, he refused to go on board for fcar of frightening the captain's wife, whose husband was with the attacking party. He went up the side of his own ship without assistance, and called to the surgeon to get ready his instruments, as he knew he must lose his arm, and the sooner it was off the better. The first attempt that he made at writing with his left hand, only three days later, was the request for the promotion of one of his lieutenants. Such incidents as these explain why he won. not only admiration, but affection. He was always a popular commander, because he cared for his men, as well as led them to victory. One of his greatest achicvements was maintaining the health of his crews; he studied every detail that affected their comfort and welfare. Moreover, he was atways proud of his men. He never complained of them, but writes in such words as these: "Not a man or officer in the 'Abemarle' that 1 would wish to change." "Nobody can be ill in the " Agamemnon's ' company, they are so fine a set." And of his captains he says. " They are my childrem : they serve in my school, and I glory in them."

Nelsom's experiences in fighting were remarkable. even in a hard fighting alse. In 1797, when not yet forty, he had been actually engaged against the enemy upwards of one hundred and towenty times. And his most famous battles were yet to come. In April, 1798, the Admiral, on board the "Yanguard,"
rejoined Lord St. Vincent off Cadiz, and on Augus衣 ist of the same year he defeated the French flect in the far-famed battle of the Nile. When, it? October, the news of this great victory reaclest London, there was intense enthusiasm. A special thanksgiving prayer was read in all the churches for three Sundays; the King's speech at the opening of parliament referred to the "great and brilliant victory which may lad to the general deliverance of Europe." Nelson was gazetted a peer by the title of Baron Nelson of the Nile and Burnham Thorpe; be was voted a pension of $£ 2,000$, and honours were showered upon him from all quarters:

In 1801 a British fleet under Sir Hyde Parker was scnt to the Baltic against the Northern Confederacy of Russia, Sweden and Demmark, who were opposing England, and Nelson, as Vice-Admiral, led the attack on the Damish fleet at Copenhagen. It was there that the well-known incident occurred of his clapping the telescope to his blind cye and. declaring that he could not see the signal to cease firing. This was really only a joke, as it was understood that he was to contimue the action if he thought best. That his kinduess and humanity were not only for his own countrymen is shown by the letter he sent to the Danish Crown Prince during the battle, which runs as follows: " Lord Nelson has directions to spare Demmark when no longer resisting; but if the firing is continued on the part of Demmark, Lord Nelson will be obliged to set on fire all the lloating batteries he has taken, without having the power of saving the brave Danes who have defonded them." It is to this that the poet Campbell refers in "The Battle of the Baltic." in the lines:

> "Ontspoke the victor then, As he hailed them oer the wave, le are bronliers, ye are men, And we conquer but to save."

This letter brought on a truce, and Demmark afterwards left the confederacy. Nelson was now raised to the dignity of viscount, under the title of Viscount Netson of the Nile and Burnham Thorpe.

In (Ictober, i8or, peace with France was signed. but it was not to last. War was declared again in May, 1803, and Nelson. as commander-in-chief, was sent to the Mediterranean to hold the French Heet in check. He blockaded the French ships in Toulon for eighteen months, determined to fight them whenever good opportunity offered. In April, 1805. the French flect under Admiral Villenemve saited ont of the Mediterranean and were joined
by Spanish ships from Cadiz. Nelson made ready to follow them. Napoleon's plan was that his three fleets should sail from Brest, Rochefort and Toulon at about the same time, meet at Martimique. and returning all together gain control of the channel and open the way for the invasion of England. The Rochefort squadron sailed in January, waited in Martinique for the time agreed upon, then returned alone; the Brest Heet was blockaded so closely by Cornwallis that they could not get away at all. Villeneuve's ships were pursued by Nelson to the West Indies, and when the French admiral found that he had missed his colleague and that Nelson, with fourteen ships, was close upon him, he thought it wiser to return to lirance. Nelson, misled by false information, sailed for Trinidad, but finding no trace of the enemy, and deciding that they had gone back to Europe, he made for Cibraltar, where in June, 1803 , he set foot on shore for the first time in two years. On the $22 n d$ of July Villenenve's fleet was met by fifteen liritish ships umler Sir Robert Calder, and an indeesive action was fought: but Villeneuve turned southward and anchored in Cadiz Bay. When Nelson, who had returned to England, heard this, he said: " bepend upon it. 1 shall yet give Mr. Villeneuse a goocl druhbing." On September iftli, 1805 , he left England for the last time, embarking at Portsmonth in the " ${ }^{\prime} \mathrm{ic}$ tory." He joined the English fleet off (adiz on September 28th, and was received with great joy. The enemy hat thirty-six shijs, while delson had but twenty-three. He kept urging the authorities at home to send him ont more ships. He realized that the French fleet must be destroyed. "It is annihilation that the country wants, and momerely a splendid victory. * * * Numbers only can amihilate." Ite planned the method of attack in all its details, and explained and disenssed the plan with the admirals and captains of the fleet : so that when, on the morning of the 21 st, the cnemy's ships came in sight, every officer in command knew what was to. be done.

When he had seen everything arranged for batthe, Nelson went down to his calbin and wrote a brief note of what was happening. Then, on his kinees, he wrote the following prayer: " May the: great (od whom 1 worshipg grant to my conntry -and for the bendit of lenrope in aconeral-a great and glorions victory; and may mo misombluet in ansone tarnish it: and may hmmanty aiter victory be the predminant feature in the dritish flect. for myself, individually, I commit my life to llim who
made me, and may His blessing light upon my endeavours for serving my country faithfully. To Him I resign myself and the just canse which is entrusted to me to defend." At half past eleven Nelson made the celebrated signal, " England expeets that every man will do his duty." At twenty minutes past iwelve Vice-Admiral Collingwood's ship, "The Royal Sovereign," fired the first gun mon the enemy, though she had been under heavy but ill-directed fire for some time. "The " \ictory," attacking the enemys centre, was also exposed to heavy fire. Nelson's secretary, standing by his side. was killed by a round-shot, and another passed between Nelson and Captain Hardy. At twenty minutes past one a musket ball from the mizzen top of the French ship " Redoultal)te " struck Nelson on the leit shoulder and passed throngh his lungs and spine. Is Captain llardy raised him, he said. "They"ve done for me, Hardy." " I hope not," answered Hardy. "I'es," replied Neflison, "my back-bone is shot through." He was carried below, covering his face with his handlecechief that his men might not know that he was wounded. He lived for three hours, still imxions about the battle, still caring for the safety of his men. "W'ill no one bring llardy to me? He must be killed!" And when Harrly came, - "How goses the batte?" When the message was brought that fifteen ships hat struck, "(ouly fiftern! I had hoped for twenty:" ." Anchor, llardy, anchor!" he repeated, faring for the safety of crippled or disabled ships in the bad weather that threatened. Then "Kiss me. Hardy," ant the lan worls, "Thank God. I have tome my chaty."

In less than an lomer aiter his death the battle was wer, having lasted five hours. Fighteen of the ememy's ships had been captured and the rest hat tled.

The news of the batle reached England on Noyember foth. The " Vietory." with Xelsm's body, arrived at spithead on becember $5^{1 T h}$. The body lay in state in (irecnwich hospital from the fith to the sth of Jamuary and on the , wh it was plated 'n the erypt if Si. I'aul's catheeltal in a sareophagus made ly (atrimal Winsey for Henry Vlll. Nowe in the cathedral is a momaneme by fasman. There ate many wher menorials of him in differem parts of the kingolom, the mos motabe lecing Tratalgar Sylate in Lometon. In the centre of this great open space rises a gramite colmme 145 feet high, crowned with it tatue of Nelsom. The pelcestal is :umpurd with rediefs in broma, cast with the metal oi calp-
tured Frencli camnon, and representing scenes from the four great battles, St. Vincent, Aboukir, Copenhagen and Trafalgar, Four colossal bronze lions couch upon pedestals rumning out from the column in the form of a cross. But his most lasting memorial is in the hearts of his countrymen.

Sharer of our mortal weakness, he has bequeathed to is a type of single-minded self-devotion that can never perish. As his funeral anthem proclaimed, white a nation mourned, " His body is buried in peace, but his name liveth forevermore." Wars may cease, but the need for heroism shall not depart from the earth, while man remains man and evil exists to be redressed. Wherever danger has to be faced, or duty to be donc, at cost of self, men will draw inspiration from the name and decds of Nelson.-Mahan's Life of Nelson.

Note.-The following books wiil be found useful in preparing lessons on Nelson: Nahan's "Life of Nelson," Sontliey"s "Life of Nelson," "Nelson and His Captains," W. H. Fitchett. "Nelson" in English Men of Action Series, J. K. Laughton. "Horatio Nelson and the Naval Supremacy of England," W. Clark Russell.--Heroes of the Nations.

For recitation-Browning's "llome Thoughts from the Sea." Scott's inlroduction to the first canto of Marmion -lines begiming, "To mute and to material things." Temyson's "Ode on the Death of the Duke of Wellington" -lines lieginning, " Who is he that cometh, like an honoured guest," and " Mighty seaman, tender and true," Campbell's " Battle of the Battic."

## A School Outing.

A teacher kindly sends to the Review an account of an outing held at Maple Grove, N. B. This pleasant practice of parents, teachers and children meeting together is one that might be used to advantage these pleasant autumn days, giving the boys and girls wholesome enjoyment, and making the teacher's work easier, because such reumions bring them into closer relations with parents. Our correspondent says:

Yesterday afternoon we held a very enjoyable school picnic late, upon gromals well shaded with trees, just across the highway in from of our schoolhouse. Notwithstanding the busy harvesting, there was a good attendance of parents and friends assembled to enjoy themselves with the school, in swinging, games, races, ctc. Twelve prizes were awarded in the competitions. The children were frecly treated to candy and muts. A delicious tunchems wats serverd on the grass loy the lidies, to which ample justice was dome. The weather was delightful, and all appeared to enjoy themselves very much. At sunset all dispersed for their varions homes, agrecing that they bad spent a most delightful afternoon.
J. B.

## Our Native Trees.

BY G. U. HAY.
The Poplars and Willows.
The poplars and willows are near relations, belonging to the great willow family (Salicaceæ). Nearly all our native willows are shrubs, except the black willow (Salix nigra), which is of rare occurrence here. Those large tree willows found in cultivated places throughout these provinces are not native, but have been planted for ornament. One species called the brittle willow (Salix fragilis) because the twigs break easily at the base, is frequently found with a trunk diameter of from four to six feet. One at lngleside, N. B., is nearly six feet througls the trunk, and is supposed to be over a hundred years old. It is still a handsome tree.

The wood of the willows is soft and white, and is used for making wooden dishes, toys, and other similar purposes. What is used here, however, is imported. It has been suggested that the willow might serve a purpose in the manufacture of coffins, as it easily decays. The yoming stems and branches of certain willows are withy, and used by Indians for making baskets.

Both poplars and willows are fast growing trees. Most of the latter grow in moist, low places, and along streams. They are sometimes planted by rivers where washouts occur, to prevent further ravages in freshet times. The poplars grow on higher ground, ustally with white birches, red maple and others that love a light soil: but all of them flourish and grow to a larger size in richer ground. The common poplar or aspen springs up readily after the ravages of a fire. This may be due to the rapid spread of the seeds which are enclosed in a cotton-like envelope: or, where this tree has occupied the ground before the fire, young ones may rapidly spring up from underground suckers which have not suffered from the heat.

Three poplars are native to these provinces-the aspen, the large-1oothed-leaved poplar and the balsam poplar. They are not favorites with farmers or horticulturists on account of their spreading so rapidly from the suckers of o!der trees; and they are oljectionable as shade trees (as are all poplars, native or foreign ) from the cottony masses of seeds which cover the streets or patlys in late spring.

The most common poplar is the aspen, sometimes wrongly called "popple." This is the Populus tremuloides, its specific mame being derived from the trembling of the leaves, which quiver in the
slightest breeze. This is caused by the flat thin petiole of the leaf being easily swayed by the wind. There is a legend that the wood of the cross was made from this tree, which is the cause of its trembling -as if for shame. This quivering is characteristic of other poplars, and is no doubt the reason for the name of the genus, from the Latin populus, the common people, because of the restless, swaying character of the mob.

The leaves of the trembling poplat are broadly ovate or roundish, finely crenulate or toothed all round and coming to a sharp point. The bark is greenish; the wood soft, weak, light in colour. A cubic foot of it weighs twenty-five pounds. The young growth is used for making excelsior matting, and the wood makes a good finishing when found large enough, the fibre being wugh, aithough the heart is bad.

The large-toothed-leaved poplar (lopulus grandidentata) is larger thath the preceding, with the edges of the leaves broken up into great teeth. Its wood is slightly heavier and more compact than the preceding, weighing twenty-nine potuds to the cubic foot. Its uses are the same. In spring, its leaves are a soft grayish white colour, and coming out after many other trees are in blow produce a beantiful contrast to the delicate fresh-green tints of the woods.

The balsam poplar (lopulus balsamiicra) is a larger tree than either of the pececoling, and has very resinous buds. It is not common; but the writer observed great stretches of low land covered with it along the upper valley of the kestigouche river. where its suckers had formed a dense mathing in the gravelly soil, shatting out every other tree. . I varicty of the balsam poplar called the balm ni Gilead (Populus balsamifera, var. candicans) :s frequently planted for ornament, but there are the same objections to it ats alrove boted.

The Lombardy poplar and the alpele or white poplar are not native. Dut are frequenty planted. One or two of each add to the beatuty of a grove on the borders of a lawn.

## A Home-Made Recitation Book.

Having quite a collection oi select readinm. poetry, etc., cut from old journals, papers, and magazines, I decided we enuld hest preserve then: for futhre use in a serap book.

I obtained an old law book-this was selected because it was large, well bound, and put ture ther with strong thread-and carefully removed every
other leaf, sometimes two or three in a place, to allow for the paper to be put in.

It was then divided into sections, one for Christmas selections; others for hmmorous, patriotic, pathetic selections.

The recitations were then neatly pasted into the book each in its proper place. After it is all filled we are going to arrange an index.

The pupils take interest in finding something good enough " for the book, for of course only the best selections are put into it, and those bits stitable for pupils ats recitations for Friday aftermons, or for special entertainment programmes.Teachers' Magazine.

Will teachers who have grod selections for Christmas, Empire, Arbor Day, Firiday afternoons, and other schwol occasions, kindly send eophes of them to the Revien for publication, so that other teachers may have the benefit of then.

## The Poetry of Earth is Never Dead.

The pertry uf earth is mever deat :
Whell all the biets are faint with the ber smm,
And hide in conling trees, a voice will run
From hedge to hedge about the new-monnomeat:
"that is the grathoppers- he tiokes the lead In summer laxury, -he lats never done With his delights, for when tired out with fand He rests at catne bencath sume pleasant weed.
The poetry oi caril in ceasing mever:
$O_{n}$ a lome winter evening, when the irost
than wronght a silence, from the stuse there shrills
The cricket ${ }^{\text {a }}$ wilg. in wamth inereaning ewer,
And seenis to one in drowsiness half lost,
the granhmper's atmong some graloy hill,
-Kicats.
In the starly of a perem the following exercise has been fonmd to he profitalsle and pleatsath: ()ne pupid reads a stamza. Ile reads it agetim, this time chathsing as matyy work ats possible to work hating the sambe meaning alow the same number of syllables, if posilne". "The following is ath illustration, ats reat loy a pupil in the lifth grate:
"Then Nature, the losing mother In the mormy month of leater, Arayed in yellow and crimain ller chaidrem, the antum leave."

The verse changed reals ats follows:
"Then Nature, the gentle mother. In the shaning momh of leals. Dressed in yellow and scarlet Her children, the forest leaves."

## Notes on "The Deserted Village"*.

By Principal G. K. Butler, M.A., Halifax.
Oliver Goldsmitil (1728-1774).
Goldsmith was born in the county of Longford, treland. His father was curate at this place. As a boy, Goldsmith attended the village school taught by an old soldier, whom he afterwards pictured in the "Deserted Village." At the age of seventeen he went to Trinity College as a sizar (a free studen receiving tuition in return for certain work). He quarreled with his tutor and left, but afterwards returned.

He tried different professions, and while on the continent as a medical student, tourcd Europe, supporting himself by playing on the flute. On his return he tried teaching, but finally took up work as a hack writer.

The Vicar of Wakefield, his first important work, he sold in 1764 for 660 to pay rent. In 1770 the "Deserted Village" appeared.

Among his other works are: "The Traveller," "She Stoops to Conquer," Histories of Greece, Rome, and a History of Animated Nature.

It is prestmmed, of course, that the first lesson assigned on the poom is the reading it all through at home. When that has been carefully done, the class is ready to begin its studly. This applies equally as well to all the selcetions for the year. The more the pupil absorbs and retains, the greater will be the benefit derived by him; and there is no royal road to this result. Repeated reading on the pupil's part, and constant questioning by the teacher, alone can accomplish the purpose aimed at.

Concerning the title, the chilitren should be asked to tell in their own words the cause of its desertion. Is the same cause at work in Nova Scotia? Where is the village supposed to be? Grade VIII may be given an occasional word or phrase for parsing, and any questions of that kind in these notes are intended for that class.

Page I, line I. In what case is Auburn, and what figure of speech would yon call it? Plain; in other parts of the poem he applies another tithe to it. What is it?
7. Green. What would we call it? Have we anything similar?
27. Smutted fuce. Very likely many of the children have a game of this character. There used to be one among the boys some years ago.

On this page the following words are worthy of a little dictionary work by the pupil : sarain, parting, scats, cot, decent, train, feats. There are also some other figures of speech besides those mentioned; find a metonomy and also give a definition. If the chiklren know the different metrical feet, have them sean a few lines as practice. Those who have read

[^2]Gray's "Elegy " could see a similarity and a difference. What are they?
l'age 2, line 2. Taught toil to please. Ask for explanation.
6. Is the verb are fled active or passive? Why? Compare with the forms is come, was gonc.
io. What does this line mean?
13. Why solitary?
20. O'ertops. Try to get a list of words similarly formed. English formerly, like modern German, compounded its words thus.
24. Meaning? How are new words created?
25. One of the problems of England is the restoration of physical vigour to the so-called lower classes.
28. How many people to the square mile would this allow for? Was England or any other country ever so thickly peopled?

Word study: Lazn, tyrant, stints, desert, spoiler, wholesome, glades.

Page 3, line 3. Meaning? Look up the derivation of wealth.
4. Parse train. What is the meaning?
8. As an illustration, take some of the modern large cities, such as London and New York. The greater poverty seems always to be found nearest the greatest weaith.
22. Compare train here with the same word in line 4.

24-25. Consult the life of Goldsmith as an illustration of these, and all will agree as to the truthfulness of them.
26. Meaning of last clause?
28. Compare lusband, the verb, with the noun. Life's taper is what figure?
29. What does this mean?

Word study: Opulence, allicd (especially pronunciation).

Page 4, line 10. What is the meaning of the word world?

12-15. Meaning of these lines? Why guilty state?
15-18. Figures of speech?
21. Meaning?

22 et seq. Compare the opening stanzas of Gray's "Elegy" for a description of the same time of day. One of the facts mentioned does not suit our hours; which one?
Word study: Decp. i'acant.
Page 4. line 1. Why sucet confusion? How can the aljective be true?

The Pracher. Those who can should read parts of the "Viear of Wakefield," where we have him
described at greater lengtl. Of what man is this a description more or less fanciful? In Chatucer we find the other well known description of the parson.
20. We must remember, of course, the greater purchasing power of money in that country at that time as compared with our time and country. What is the meaning of passing?
21. What figure of speech is ran his godly race?

23-24. What is the meaning of these lines? What does Goldsmith wish us to imply concerning appointments in the cluurch at the time he is writing?
26. Raise and rise. This line will illustrate a lesson on those two verbs.
27. Vagrant train. What wonld we call then?
29. Why long remembered?

Word study: Fluctuate, mantling, cresses, fusgot, pensive, copse, fazen, broken.

Page 6, line 5. What does pity gave cre chari!y began mean?

## 7. And this?

13. Compare with the ungracious pastor mentioned in Hamlet, "who reeks not his own rede."
14. Parting. Compare "The curfew tolls the knell of parting day:" What figure of speech in this line?
15. Parse fled. The last four lines of the page are a good example of a figure of speech.

Word study: Glow, scan, scoff, rustic, z'ale.
Page 7, line 2. Why unprofitubly?
3. Noisy mansion. Many similar epithets can be found in literature. Two modern sehools and schoolmasters may be found in the "Drumtochty School " and "Glengarry Schooldays."
6. To what class of putpil did Goldsmith evidently belong? However, the idle and truant scholar does not alteays make the most famons man.
9. Full well; the same phrase is used on p. 34.1. 2. What part of speech is full here? What other word or words could be used in its place?
17. Terms and tides presage. What does this mean?
26. A word is here used that we wond not now be allowed to use in modern correct English. Which?

The $/ n$. What takes the place of this in modern villages as a place to congregate and talk politics?

Word study: Yon, furze, boling, grume.
Page 8, line 2. Sanded floor. The generation of Nova Scotian now passing away can recall the same custom here.
10. Can any of the pupils tell of having seen something like this?
11. What do you muderstand by chimney? Give modern word for place mentioned.
23. Find word mantling already used and compare their meanings.
27. Train again; compare former uses.
32. Vacant was already used in this meaning. What do pupils give as its meaning when first asked?

Word study: Aspen, transitory, ballad, ponderous, deride, gloss, natio'e, masqucrade.
lage 9, lines if et seq. Horace, who lived abont s Soo lefore (iokdsmith, laments of the luxury of the wealthy Romans in much the same terms.
21. How can this be?
22. Seat. Compare with the same word already used. Why are his sports solitary?
27. The prophets are still predicting the downfall of England's power, and still lamenting the glories of the past.

Word study: Decoy, limits, spurns, solicitous.
What figure of speed is found on this page?
l'age 10. Word study: lerging, ìistas, strike, contiguous. limits, baneful, panper, brocade, plies, syuare, chariots.
13. There is a figure of speech.
l'age 11, line 7. W'hed: meaning? Parse brown and comery. Is the lot of the emigrant here truly representel? To what comntry does Goldsmith make them go? What Jritish possession has the climate and characteristics here mentioned?
29. Ningling the ravished landscape with the skics. What is the meaning of this? ()f what comeries can this now be said?
l'age 12 , line I . Has parting the same meaning as in 1. 4?
6. Wain. What other word has been meed. What do we call the reestern main?

23 it seq. Name some of the kingdoms (ioldsmith may have had in mind in writing this.

Wiord study: I'alks, conscious, plaints, cot. insidinus, florid, sapped.
l'age 13. (ioldsmith's time is not considered by anyody as the golden age of English poetry, though one or two prets of high rank lived then. Who were they?

These motes will be heppfal if they suggest other questions and difficulties, and more sin still if those be sent to the Revaw. Any I can answer, 1 with: others, perhaps, can supply vacancies in my knowlerlge.

## Schoolroom Decorations.

Miriam I. Dysart, Cocagne, N. B.
To decorate a sehoolroom is to make it a pleasant and profitable workstoop. High bare walts,dingy ceiling, broken plaster and dcfaced blackboards, creaking doors and rattling windows make up surroundings bleak and dismal enough to dampen the spirits and enthusiasm of almost any teacher; and a hundred times more do they affect the tender spirits of young children.

Let festoons and strings of evergreens be strung along over top of windows and doors, let a few neat inexpensive pictures break up the monotony of bare walls, let attractive designs in black and white, or in colors, adorn the unused blackboards-and how great the change! How bright and sunny everything has become. If now a few appropriate mottoes be placed in convenient unoccupied places (and what school lias not large wastes of cheerless plaster ligh up under the ceiling), and if flowers in season be added, then we may be said to have a schoolroom at least moderately decorated, and even then perhaps unusually attractive. It will be found that the children ean be kept interested and attentive with much more case than in the bleak and bare house, the cheerless, undecorated school.
Many, if not all, the decorations used in a schoolroom may be made to serve a double purpose. They may be useful as well as ornamental. It is not cnough that they delight the eye-they should instruct, stimulate and encourage the young.
Among the blackboard decorations whieh serve the double purpose of adding to the appearance of the room as well as inducing regular attendance and competition in work, is the bee-hive. This is a picture of a hive drawn in some quiet corner. Let the hive be the goal and the bees the pupils. Good conduct and satisfactory work entitle them to approach the liive. The effect of this little scheme is wonderful. The pupils, in their eagerness to be numbered among the "busy bece," give better lesscons, and are more carcful of their conduct, and the result is general improvement. Another dewe that is equally effective and attractive is the roll cf honor, bearing the names of the pupils making the highest averages.
A calendar for the month might decorate any unused blackboard surface. So these little deviess while adorning the walls, assist both the teachers and pupils in raising the standing of the school.

Many valuable lessons may be taught from these
decorations. Take, for instance, flowers. In the spring we have the mayflower. In ten minutes the teacher can give an interesting oral lesson on this plant; point out the different parts of a flower; get opinions as to why it is called the harbinger of spring, and relate some little story about it. Similarly, throughout the year, short nature lessons can be given on the flowers which decorate the room.

Besides lending beauty the flowers furnish good seat-work; the children can write short descriptions of them, or can draw them, and in selecting and arranging them the pupils have perhaps their first lessons in art.

Likewise many valuable lessons can be learned from the wall pictures. From the landscapes the pupils can become familiar with such geographical terms as mountain, river, lake, cape, island, etc. Pictures of the domestic animals will probably furnish most interest to the children. Many interesting facts can be learned about the horse; for example, his food, his habits, his kindness and faithfulness to man, his willingness to work and his ability to understand. Encourage the pupils to tell any stories they can that will prove the horse a noble and intelligent animal. The teacher can add some little story of the wild animals, and let the children state the points of resemblance or of difference between the wild animals and the domestic. These exereises on the pietures and flowers encourage reproduction and pieture stories.

For the more advanced pupils the teacher can select pietures of such authors as the children are studying. This plan is very successful, for the reason that the personality of the author can be associated with the lessons.

The children's maps can be used to decorate the room in an effective manner, and the exhibition of work is almost certain to win the approval of visitors and to stimulate the interest of both pupils and parents.

By this simple and attractive decoration habits of order and enterprise are fostered, a spirit of excellence in school work is created, many pleasant and profitable exercises are furnished, and, most important of all, school life is brightened.

A map is the best and most aecurate means of expressing certain geographic facts. Children should learn to rearl a map as readily as a newspaper, that they may use maps intelligently in later years.-Journal of Geography.

## Mental Mathematics.

F. H. Spinney, Oxford, N. S.

Probably no part of elementary mathematics furnishes such a variety of interesting problems as does the "unitary method." It is in comnection with such problems that teachers who delight in long written expressions can have their most ambitious desires in that direction gratified.
It must be admitted that these expressions, when neatly written upon the board, or in well-kept exercise books, present a pleasing appearance to the artistic eye; but they often represent but a mechanical expression of rules previously learned,' without a clear comprehension of the relation existing between the terms involved. Besides, there are more appropriate subjects of the curriculum affording abundant opporturity for artistic workmanship; so we can well afford to limit the use of mathematics to the exercise of rapid and accurate reasoning. The following simple"problem is a typical question of the unitary method: If 3 boys in 4 days carn $\$$ ro, how much can 15 boys earn in 12 days? This is usually solved in the following manner:

> 3 boys in 4 days can earn $\$ 10$
> I boy in 4 days can carn $\frac{\$ 10}{3}$

I boy in 1 day can earn $\frac{810}{3 \times 4}$
15 boys in 1 day can earn $\frac{810 \times 15}{3 \times 4}$
15 boys in I2 days can earn $\frac{810 \times 15 \times 12}{3 \times 4}=8150$
In mental arithmetic exercise, let the teacher write the question on the board:

> (a) 3 boys in 4 days can earn $\$ 10$
> (b) 15 boys in + days can earn ?
> (c) 15 boys in 12 days can earn ?

If it is the first lesson, the following dialogue might take place, pupils raising hands to give the answers: Tcacher-How many more men in (b) than in (a)? Pupil- 5 times as many. 'r.-Tlien. how much will 15 boys earn? I'. 5 times $\$ 10=$ \$50. T.-How many more days in (c) than in (b)? P.-3 times as many. T.-Then, how much will 15 boys earn in 12 days? P.-3 times $\$ 50=$ \$150. After doing several questions in this mamer. express the question in two lines:

> 3 boys in 4 days carn $\$ 10$
> 15 boys in 12 days carn?

After many questions of this mature have been solved mentally, the following written forms will be plain;
I. 3 boys in 4 days earn $\$$ ro

15 boys in 12 days earn $\$ 10 \times 5 \times 3$
II. 5 men in 4 days carn $\$ 30$ ${ }_{15}$ men in 2 days carn $\$ 30 \times 3 \times 2$
III. 4 men in 5 days carn $\$ 30$

$$
\text { - } 6 \text { men in } 7 \text { days earn } \$ 30 \times 1 \frac{1}{2} \times 1 \frac{2}{5}=\$ 63
$$

IV. 7 men in 9 days earn $\$ 126$

20 men in 4 days earn $8126 \times x^{24}=\$ 160$
To enable the teacher to quickly place a number of cutestions on the board for rapid solution. the following form will be found convenient:

|  | Men | Days | Wages |  | Men | lays |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | 5 | 4 | $\$ 30$ | $:$ | 15 | 2 |
| (2) | 6 | 7 | $\$ 53$ | $:$ | 2 | 14 |

To attain greater speed in mind and hand, 1 frequently try the following plan. I place upon the board alout io problems in the above form: and allow the pupils to commence their solution about 10 minutes previous to the time for dismissal. When a pupil has shown me his exerese book with the required answers correctly filled in. he is permitter (1) retire. Any teacher who desires to witness a scene of the most intense activity should occasionally resort to such a method.

The following 8 questions were solved by one of my pupils in 6 minutes:

| Men | Ihays | Wages |  | Men | Days | Wages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| (1) | 3 | 2 | $\$ 10$ | $:$ | 12 | 4 | $?$ |
| $(2)$ | 7 | 5 | $\$ 60$ | $:$ | 14 | 15 | $?$ |
| $(3)$ | 4 | 11 | $\$ 66$ | $:$ | 12 | 33 | $?$ |
| $(4)$ | 10 | 13 | $\$ 260$ | $:$ | 30 | 26 | $?$ |
| $(5)$ | 14 | 17 | $\$ 300$ | $:$ | 28 | 51 | $?$ |
| $(6)$ | 4 | 4 | $\$ 32$ | $:$ | 12 | 12 | $?$ |
| $(7)$ | 7 | 10 | $\$ 105$ | $:$ | $?$ | 10 | $\$ 420$ |
| $(8)$ | 4 | 5 | $\$ 30$ | $:$ | 4 | $?$ | $\$ 90$ |

"We owe the steel pen," said an inventor in the Loutissille' Couricr Jourual, "to a man named Joseph Gillott, an Englishuran. He was a jeweller. and lived in Pirmingham. One day. accidentally splitting the end of one of his fine steel jewel-making tools. he threw it peevishly on the floor. An hour later it was necessary for him to write a letter. Where was his fuill pen? We searehed high and low, but contd mot find it. Lamking. finally, on the flone. We disenvered, not the pen, but the broken steel tonl. "I wonder if I couldn't make shift to write with this," he said. And he tried to write with the split stect, and, of comrse, succeeded perfectly. To this episote we owe the sted pen, which has superseled the chill all over the workd.

## Rhymes and Recitations for Little People.

Finger Game.
This is the mother so kind and dear, This is the father so full of cheer, This is the brother strong and tall, This is the sister who plays with her doll, And this is the baby, the pet of all; Behold the good family, great and small.
Elizabeth, Elspeth, Betsy, and Bess,
They all went together to seek a bird's nest.
They found a bird's nest with five eggs in,
They all touk one, and left four in.
There were once two cats of Kilkenny,
Each thought there was one cat too many;
So they fought and they fit,
And they scratched and they bit,
Till, excepting their nails
And the tips of their tails, Instead of two cats, there weren't any.

The robin and the redbreast, The robin and the wren;
If you take from their nest
You'll never thrive again.
The robin and the redbreast,
The martin and the swallow;
If you touch one of their eggs, Bad luck will surely follow.
As I was going to St. Ives,
1 met seven wives.
Each wife had seven sacks; how many sacks in all?
Each sack had seven cats; how many cats in all?
Litlie Betty Blue
Lost her boliday shoe,
What shall Betty do?
Buy her another
To match the other, And then she'll walk upon two.
High in the Pine Tree A young turtle dove
Built a little nest
To please his little love.
In the dark shady branches Of the high pine tree
How happy were the doves In their little nursery.
The young turtle doves
Never quarreled in their nest;
They loved each other dearly,
But they loved their mother best.
"Coo," said the little doves, And "Coo" said she;
And they all lived so happy
In their little nursery.
Three little bumnies,
Out for a run
In the bright moon-light, Oh, what fun!
"Dear," said the little one,
"What is that
Sitting on the fence With cheeks so fat?
See its big teeth And eyes so bright!"
Then home they ran With all their might, Three funny little bunnies With eyes so bright. -Selected.
" Little drops of dew Like a gem you are,
I believe that you Must have been a star.
" When the day is bright In the grass you lie, Tell me then at night Are you in the sky?"

## Lines in Season.

One step and then another, And the longest walk is ended; One stitch and then another,

And the largest rent is mended.
Every time the world's best men
Are made from boys who try again.
"Do you wish for a kindness? Be kind.
Do you wish for a truth? Be true.
What you give of yourself you find-
Your world is a reflex of you."
I am sure that hands, lips, eyes,
Have work to do,-
The first to be helpful, the next to be wise,
And the last to be bright and true.
Let us be content to work,
To do the thing we can, and not presume
To fret because it's little.

## E. B. Browning.

It is not winter yet, but that sweet time
In Autumn when the first cool days are past.
A week ago the leaves were hoar with rime,
And some have dropped before the north wind's blast;
But the mild hours are back, and at mid-noon,
The day hath all the genial warmth of June.
-Selected.
"Then followed the beautiful season,
Called by the pious Acadian peasants the Summer of All Saints.
Filled was the air with a dreamy and magical light; and the landscape
Lay as if new-created in all the freshness of childhood."
-Longfellozi.
Heaven is not reached at a single bound,
For we build the ladder by which we rise
From the lowly earth to the vaulted skies, And we mount to the summit round by round. $-F$. G. Holland:

## N. B. Teachers' Association Statistics.

Owing to the delay of one person who had a list of names, the secretary-treasurer of the N. B. Teachers" Association has been unable until now to furnish the number of members of said Association on June 30, 1905. There were then 382 pledged members, with dues fully paid up, distributed as follows: St. John City and Connty, (6) Kings, 54 : Northumberlant, $\mathrm{f}^{6}$; W'estmorland (exclusive of Moncton), 39; Carleton. 29: (iloncester, 27: Moncton, 25; York (exchusive of Fredericton), 21: Kent, 21: Fredericton, 18; Sumbury-Queens. 16: Mbert, 8; Charlotte, 7; Victoria. 4; Restigouche, 1: Mathawaska, o; total, 382 .

During vacation a considerable number joined. and the response from Kings and kent institutes this term has been enonuraging. Returus from York, Sunbury and Queens institutes have not yet arrived at secretary's office.

All teachers who have not subscribed to the umion agreement are requested to send name and fee of 25 cents at once to the secretary-treasurer, I1. 11. Stewart, Harcourt, Kent Co.

## Teaching Children to Talk Naturally.

" If I could only get children to speak as naturatly in their reading as I hear them speak in their games on the play-grounds. I should be happy," said a teacher at an institute the other day dhring a discussion on reading.

There is nothing so monotonous as the " schontone " in reading. Try to get children ont of it by encouraging them to talk naturally in school. Some portion of the week might be devoted to the cultivation of this art. One teacher devoted a part of every Friday aftemoon to such an exereise. Early in the week she assigned some sulbject of investigation, either one of general interest, or one connected with the work the class were then doing. in art, history, science, ete. On liritay. each pupil is expected to rise and make his report fluently and in correct English. The subjects chosen are always so interesting that the chidtren som forget that they are talking, and look forward to this hour with enjoyment. The lessons in nature study especially prove very suggestive. The puphils are asked to make all kinds of observations for themselves, much of which may be done on their way to and from school, and report their record on Friday, with anw incluctions which they may have been able to make for themselves. The month of October is one of the most interesting for such olservations.

## Letter Writing.

At least one period each week should be carcfully devoted to letter writing. Remember, where date and heading should be placed, pay particular attention to manner of addressing and begiming of letter.

There is much of good style in an elegant and correct closing of a letter, as also in the method of signature. The envelope, 100 ! How many realize the impression a stranger forms of the writer of a letter from the outside of the envelope? There is one proper place for a stamp. It takes no longer to place it straight and right side up than to slap it on wherever it happens to stick. Then the address: teach your pupils that, next to using good and clean stationery, the writing an address on an envelope in a way that will not make the receiver ashamed is important.

You may easily represent upon your board by chalk outline the shape of letter paper and envelope, and give a carcful lesson by talk and drill upon the subject, and require letters embodying the special principles tanght to be written to imaginary persons, or addressed to yourself or some member of the class.

Gon will readily anaken much enthusiasm and pride in the subject.

Do what you can to improve this much neglected part of common elucation.

Wie suggest betow headiugs for subjects of different lessons on the art of letter writing; one lesson at kast may be well spent on each point :

1. The parts of a letter.
2. The address.
3. The heading.
4. The salutation.
5. The boely of a letter.
(). The conclusion.
6. The superseription.

8 . Mamer of fotding.
1). A business letter.
10. A letter ordering periodicals.
11. Change of address.
12. (Ordering bowks.
13. Ordering bill of geots.
14. Making out a hill.
15. Give a receipt.

1f. Invitation.
17. Regrets.

- American Primary Teacher.


## The Strand from Above.

The sun rose on a bright September morning. A thousand gems of dew sparkled in the meadows, and upon the breeze floated, in the wake of summer, the shining silken strands of which no man knoweth the whence or the whither.

One of them eaught in the top of a tree, and the skipper, a little speckled yellow spider, quit his airship to survey the leafy demesne there. It was not to his liking, and, with prompt decision, he spun a new strand and let himself down straight into the hedge below.

There were twigs and shonts in plenty there to spin a web in, and he went to work at once, letting the strand from above, by which he had come, bear the upper corner of it.

A fine large web it was when finished, and with this about it that set it off from all the other wels. thereabouts, that it secmed to stand straight up in the air, without anything to show what held it. It takes pretty sharp eyes to make out a single strand of a spider-wel, even a very little way off.

The days went by. Flies grew scarcer, as the sum rose later. and the spider had to make his net larger that it might reach farther and catch more. And here the strand from above turned out a great help. With it to brace the structure, the web was spun higher and wider, until it covered the hedge all the way across, in the wet ()ctober mornings, when it hung full of shimmering rain-drops, it was like a veil stitched with precious pearls.

The spider was proul of his work. No longer the little thing that had come drifting out of the vast with nothing but its unspun web in its pocket. so to speak, he was now a big, portly, opulent spider, with the largest web in the hedge.

One morning he awoke very much out of sorts. There had been a frost in the might, and daylight bronght no sun. The sky was overeast; not a fly was out. All the hong gray autumn day the spider sat hungry and cross in his comer. Toward evening. to kill time. he started on a tour of inspection. to see if anything mowed lwacing or mending. He pulled at all the strands; fiey were firm enough. Hat though the found mothing wrong. his temper did not improve; he waxed crosser than ever.

At the fartliest emb of the wel) he came at last to a strand that all at ence secmed strange to him. Alt the rest went this way or that the ephifer knew (wery stick and kim) they were mate fast to, every: one. But this preposternus strand went mowherethat is to say. went straight up in the air and was
lost. He stood up on his hind legs and stared with all his eyes, but he could not make it out. To look at, the strand went right up into the clouds, which was nonsense.

The longer he sat and glared to no purpose, the angrier the spider grew. He had quite forgotten how on a bright September morning he himself had come down this same strand. And he had forgotten how, in the building of the web and afterward when it had to be enlarged, it was just this strand he had depended upon. He saw only that here was a useless strand, a fool strand, that went nowhere in sense or reason, only up in the air where solid spiders had no concern. . . . . .
"Away with it!" and with one vicious snap of his angry jaws he bit the strand in two.

That instant the web collapsed, the whole proud and prosperous structure fell in a heap, and when the spider came to he lay sprawling in the hedge wth the web all about his head like a wet rag. In one brief moment he had wrecked it all-because he did not understand the use of the strand from above. -The Outlook. Translated from the Danish by Jacob A. Riis.

## Teachers in Session.

## Kings County, N. B., Institute.

The Kings County Teachers' Institute met at the Macdonald consolidated school, Kingston, on Thurs day and Friday, September 7 th and 8th. The natural beattics of the village and its surroundings and the attractions of the school served to draw a large number of teachers together. The arrival of Sir Willian Macdonald and Professor James W. Robertson at the close of the first afternoon's proccedings, although somewhat in the nature of a surprise, was none the less welcome, and gave an additional interest to the proceedings. Both gentlemen examined the school grounds, buildings, and the pleasant class-rooms with the closest attention. and in the evening gave addresses at the public mecting, where a fine programme of music, recitations and specehes was carried out.

At the opening of the institute on Thursday morning. Principal D. IV. Hamilton, president of the institute, gave an outline of the advantages to be derived from consolidation. and especially referred to the Kingston experiment. Inspector Steeves, Trustec Isaac Saunders and Dr. John Brittain followed in short addresses. In the afternoon a visit was paid to the school gatden, where Principal Hamilton gave some idea of the methods followed. Then came an excellent paper on School Gardens. by Arthur Floyd. of Norton, and the discussion on the paper was led by Miss W. A. Toole. A nature study exenrsion under the direction of Prof. Brittain followed, and was greatly enjoved by the teachcrs present.

Friday morning's session of the institute was spent in observing the work of the different classrooms in the Macdonald consolidated school. From 9 to to the opening exercises in the assembly hall gave the visiting teachers an opportunity to enjoy a fine programme. This was followed by an examination of the work in the rooms where the teachers of the schools conducted the usual lessons, and afforded an object lesson as interesting as it was instructive. In the afternoon the members of the institute listened to an address from Professor Robertson, followed by a lesson on cardboard construction by Mr. T. B. Kidner, director of manual training, and a paper on spelling by Mr. H. A. Prebble, principal of the Hampton Village school. The election of officers resulted as follows: Mr. A. E. Floyd, president; Miss Ina E. Mersereau, vicepresident; Mr. W. C. Jonah, sccretary-treasurer.

## Kent County, N. B., Institute.

The Kent County teachers met at Rexton, N. B., on the $14 t^{t h}$ and 15 th September. Althongh the attendance was smaller than usual, only about twenty-five teachers being present, the meeting was one of the best ever held in the county. The papers were on a variety of school topics. They were brief and to the point, as were the discussions that followed cach. Tisc public educational meeting on Thursday evening was largely attended and an excellent programme of music and addresses was carried out. On Friday evening there was a very enjoyable social reunion of the visiting teachers and people of Rexton Both mectings were held in the public hall, which was attractively decorated for the occasion. Very few places can boast of a more beautiful and commodious public hall than Rexton.

In the absence of the president, Mr. G. A. Coates, who has retired from teaching, Inspector Chas. D. Hebert took the chair and presided over the meetings of the Institute. In his opening and other addresses at the institutc, Inspector Hebert, who speaks fluently and in well chosen English, referred to many desirable improvements in the schools whose intercsts he has evidently very much at heart. These are,-a remedy for irregularity of attendance, a closer sympathy between parents and teachers, well kept school grounds, and attractive decorations for schoolrooms.

Miss Miriam L. Dysart read a well writt:n paper on Reproduction of Stories. Another on Schoolroom Decorations, prepared by the same teacher, will be found on another page. Miss Dysart speaks on what she practises, for, said the inspector, her schoolroom has the neatness and attractiveness of the most cozy home. Mr. J. A. Edmunds, vice-principal of the grammar school, Richibucto, gave an expert talk on elementary arithmetic. M1r. G. Douglas Stecle, vice-principal of the graminar school, read an excellent paper on the Importance of Reading, which he characterized is the most important subject of the school. The greatest care should be taken to secure proper ex-
pression and a clear understanding of what is read. Miss Kate Keswick read a paper on the Relation of Teacher and Pupil, strongly urging greater sympathy and courtesy. Mr. H. H. Stewart, secretary of the New Bronswick Teachers' Association, spoke on Professional Etiquette, referring to the failure of some teachers in courtesy to trustees and districts, the unwise practice of some who belittle their predecessors' work, and condemning the frequent practice of under-bidding other teachers in order to secure schools near home. The New Brunswick Teachers' Association, numbering last Junc about 400 dues-paying members, had been instrumental in decreasing under-bidding, and in many places of raising salaries. A second paper prepared by Mr. Stewart was read later-the Educative Valuc of History.

At Iriday morning's session Mr. A. E. Pearson read a paper on the Care of School Grounds. This, with the discussion that followed, was one of the most valuable presented to the institute in the practical hints brought out on tree-planting and ornamentation of grounds. In the afternoon Dr. Hay gave a model tesson on plants collected within a few paces of the schoolroom, followed by an excursion illustrative of the lesson.

The institute will be held next year at Harcourt. The following officers were elected: President, Inspector Hebert; Vice-president, Kate Keswick; Secretary, A. E. Pearson; additional members of the Exccutive, Mimic Buckley and H. H. Stuart.

## York County Teachers' Institute.

The York County, N. B., Teachers' Institute met at Fredericton on 'Thursday and Friday, September 21st and 22nd, in the assenbly hall of the high school building. A large number of the teachers of Queens and Sunbury Connties jomed the institute, the total number enrolled being over 150 . The low fares on railway and stcamboat, and the attractions of the beautiful city of Fiedericton, which had drawn a large number of other visitors to the Exhibition, was an opportunity of which many teachers availed themselves. The addresses at the opening were encouraging and stimulating. President F. A. Good thought teachers should have noble ideals, and endcavour to the utmost to attain to then. (hief Superintendent Dr. luch encouraged teachers to work for the best results; not to talk too muth about salaries, but to let their work appeal to the ratepaycrs, whose means supported the schonl. Inspector lisidges followed up this thought by urging teachers to invite ratepayers to the school to see the work done. and then to suggest on this basis an increase of salary. Dr. Hay thought teachers should have a friendly competition with cach other in making schoolrooms so attractive and interesting that scholars would delight to be in them. P'rincipal Foster would like to give his opinon of those people who talk merely and do nothng to improve teachers' salaries.
'Round table discussions on nature work, led by

Mr. H. G. Perry and President Good called forth many useful hints on the best way to utilize material found in the neighborhood of the schoolroom. The opinion was expressed that a nature-study course should be outlined for the guidance of teachers.
At Friday's sessions the addresses and discussions were of much interest. Mr. T. B. Kidner illustrated, with a very complete series of models and pupils' work, how a practical course in manual training could be carried out in country schools; Miss Agnes Lucas gave an interesting address on Ambidexterity ; Miss E. L. Thorne gave some pleasant impressions of a visit paid to the hgh schools of Boston, Buffalo, Chicago and Toronto. She had been pleased with what she saw, especially the uniform courtesy of the pupils, but in the matter of foundation work she believed that New Brunswick schools were equal, if not superior, to any that she saw. We have much to attain to, however, in the branches of music, drawing and physical culture. Professor W. C. Murray, of DalhousteCollege, gave a very clear and interesting address on Psychology, in which he outlined numerous points that may guide the teacher in training the child. The new psychology that has arisen is that which studies the child, as a botanist would study the growth of a bean.

The following are the officers of the institute for the current year: C. D. Richards, B. A., president; Miss Sadie Thompson, vice-president; Miss E. L. Thorne, secretary-treasurer ; B. C. Foster, H. G. Perry and Clarence Sanson as additional members of executive.

## CURRENT EVENTS.

The 2rst of October is the one hundredth amiversary of the battle of Trafalgar. The proposal to celebrate the day throughout the British Empire is opposed by some on the ground that Lord Nelsen's private life was not commendable; and by others, for the more convincing reason, that the good understanding existing between the French and British peoples should not be disturbed by our illtimed rejoicings over the event.

The British government will establish a vast naval depot at Singapore, making it the centre of British naval power in the Far East.

The Germans have won a victory over the rebellious natives in German Southwest Africa.

The bridge over the Zambesi River at Victoria Falls was formally opened on September 12th. It crosses the gorge below the falls, at a height of four hundred and twenty feet above the water: and is the highest bridge in the world.

The flagship of the Japanese admiral accidentally took fire and sank in the liarbor of Sasebo, and hundreds of men were lost. An effort will be made to raise the ship. Admiral Togo was not on board at the time of the disaster.

By a series of earthquakes in Calabria, Italy, more than two hundred towns have been damaged, and about six hundred lives lost.

The conclusion of peace with Russia has given great dissatisfaction in Japan, and serious riots have resulted in some of the larger cities.

The first Buddhist temple in America, or, at least, the first within historic times, will shortly be erected at Los Angeles, Cal. There are some rather incredible stories of Buddhist missionaries on the Pacific coast of America before the days of Columbus.
Astronomers who went to Labrador to observe the recent eclipse of the sun were disappointed, as the weather was unfavorable. In Egypt, however, the observations were successful; and one result is said to be the discovery of a new planet between Mercury and the sun.

A special agent of the Canadian government has prevailed upon the government of Uruguay to release the Canadian sealing vessel and her captain, so long held on a charge of poaching in Uruguayan waters.

Quickly following the close of the war, the Czar has decided to call another peace conference to meet at the Hague. The time and scope of the conference have not yet been announced. Lord Salisbury's dream of a European federation, and Tennyson's parliament of man, would seem to be nearer realization if the nations would cease preparing for war while they are talking of peace.

The Frencli war department is experimenting with a machine gun to fire three hundred bullets in less than a second.

A state of war exists in Southern Russia, where the Tartars are in arms against the Armenians. The Armenians have the lead in the commerce and industries of the Caucasus region, and the Tartars are bent upon their extermination. The great oil works at Baku have been destroyed. The region is under martial law, but the military are unable to control the situation. Latest advices say that a truce has been arranged between the warring parties, to take effect October $14^{\text {th }}$; and that a conference of representative Armenians and Tartars, held under the presidency of Prince Lonis Napoleon. governor-general of the Caucasus, has decided to summon a general congress representing the inhabitants of the Caucasus, for the purpose of discussing the causes of the enmity.

Negotiations for the separation of Sweden and Norway are still proceeding, and will probably end in a peaceful dissolution of the union.

A reduction in the force of the Northwest Mounted Police will follow the creation of the new provinces of Alberta and Saskatchewan.

The territory of Keewatin has been taken from the control of the governor of Manitoba, and attached to the Nortlwest Territories.

The proposal to build an Australian Transcontinental railway has been thrown out by the federal government.

Hard times in South Africa has had an effect upon polygamy among the Zulus. The richest and most powerful chiefs now seldom have more than fifty wives, and the ordinary natives are content with one. Money that formerly went to the purchase of wives is now said to be devoted to buying cows.
Dr. Barnardo, who died in London on the 20th ult., is said to have rescued over fifty thousand orphan children and trained them for useful lives. He was born in Ireland in 1845.
By the new treaty with Japan, the full particulars of which have not yet been disclosed, Great Britain secures the aid of Japan in case of any attack upon Britislı India.

The French expedition to Greenland under the Duke of Orleans has discovered unknown land.

The arms of Prince Edward Island have been officially sanctioned as follows: Argent, on an island, vert, to the sinister an oak tree, fructed, to the dexter thereof three oak saplings, sprouting, all proper; on a chief, gules, a lion passant guardant, or. This is, in common parlance, on a silver ground a representation of an island with the three small trees under the great one, familiar on the old coinage of Prince Edward Island; and across the top of the shield the same golden lion on a red background that is seen in the arms of New Brunswick. By doing away with the motto, "Parz'a sub ingenti," which was quite in place on the seal of the province, but not in a coat of arms, and by adding the touch of color in the red chief with its gold lion, it makes a pretty combination; and it effectually disposes of the impossible arrangement of oak and maple leaves with which some Ontario publishers had endowed the Gulf Province.

It is estimated that the Canadian wheat crop this year will aggregate one hundred million bushels.

Thursday, October 26th, is appointed as Thanksgiving Day.

## SCHOOL AND COLLEGE.

Mr. S. R. MacInnis is the principal of the Berwick, N. S., schools this year, with Miss V. M. Batten and Mrs. J. W. Margeson as associates.

Mr. R. B. Masterton, A. B., has been chosen primeipal of the Port Elgin, N. B., superior school. Mr. Masterton is an experienced and capable teacher, and the prospects of the school are excellent for the coming year.

The New Glasgow, N. S., high school, of which Mr. John T. McLeod is principal, has made sevcral changes in its staff of teachers for the present term. Mr. W. C. Stapleton, of Halifax, is the vice-principal, Miss Redmond, of Pugwash, the teacher of domestic science, and Mr. Douglas Patterson of Truro, the head of the manual training department.

A new department of domestic seience has been opened in the Sydrey, N. S., schools. Miss McCallum has been engaged as teacher.
Mr. J. Keith has been chosen principal of the Benton, N. B., superior school, with Miss Inez Day as teacher of the primary department.
The Acacia Villa school, Hortonville, N. S., has re-opened for the current year with larger numbers and brighter prospects than ever under the charge of the experienced veteran teacher, Mr. A. McN. Patterson.

Miss Mabel V. Elliott, who went from Newcastle, N. B., with the corps of teachers to South Africa three years ago, was recently married at Durban to Mr. Chas. J. Stewart, of London. The happy couple, to whom the Review extends its best wishes, will reside at Umzumbi, Natal.
Miss A. Laura Pcck, B. A., of Wolfville, N. S., for several years teacher in the schools of New Brunswick, will leave shortly for India as a missionary.
The Provincial normal school of New Brunswick opened at Fredericton, September 6th, with the largest enrolment $i_{n}$ its history- 260 students, of whom twenty-three are in the French department.

Mr. J. W. Hill, of Hampton, has accepted the principalship of the McAdam, N. B., superior school.

Mr. F. R. Branscombe, of Cornhill, has taken charge of the advanced department of the Hopewell Cape, N. B., superior school.

Principal R. W. Ford continues his efficient management of the Wolfville, N. S., public school with the following named staff of associate teachers: Miss Ella McLean, Miss Gerırude McIntosh, Miss. Prudence Parker, Miss Elizabeth Eiderkin, and Miss Maie I. Messenger, The latter takes the place of Miss Hamilton, absent on leave.

Miss Edith A. R. Davis, A. B., of Fredericton, who taught last year in Albert County, has gone to Chicago University to take a post-graduate course in classics.

The teachers of Glace Bay, N. S., at a recent meeting, dectued to re-organize their local institute and hold meetings quarterly in future. Principal D. M. Natheson is the president.

Mr. Ilarry Burns, B. A., has been appointed principal of the Dorchester, N. B., superior school, with a capable staff of associate teachers, of whom Mr. Edward A. I,ytich, B. A., has charge of grades seven and eight.

Miss Blanche Moser, of Parrsboro, has been appointed to a position on the Sydney Mines, N. S., schools.

Miss Laura Crcelman, of Truro, is on the staff of the Port Hawkesbury, N. S., schools this term.

Messrs. Clement Kelly, B. A., W. R. Shanklin and lietcher Peacock, of New Brunswick, have gone to Guelph, Ont., to take a three months' course in nature study, provided for by the N. B. Department of Education.

Niss Gladys Strople has charge of the school at Glasburn, Antigonish County, this term.

That is the proper spirit; and we hope it is a spirit that will take possession of rate-payers and schools elsewhere.
Principal Oulton, of Amherst, has taken charge of the Lower Stewiacke, N. S., school for the present term.

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"The Upper Sackville school has begun work with Baxter Barnes again as teacher. The district voted $\$ 300$ for repairs on school house, fence and grounds.. The inside of the building has been thoroughly remodeled, enlarged and painted inside and out. New seats have been purchased and a room provided for the children to wash. A new fence has been erected. The contract has been given for levelling the lawn, which will be done soon. The ratepayers are unanimous in the determination to make this one of the best schools in New Brunswick." -Sackville Post.
Mr. G. E. F. Sherwood, A. B., recently of the Bloomfield, Kings County, sugerior school, has been appointed principal of the grammar school, St. Andrews, N. B.
Mr. W. J. Shields continues as principal of the Hantsport, N. S., schools, a position he has held with distinction for several years. With him are associated Miss Sadie E. Shaw, Miss Bowlby, Miss MacCully and Miss Miller.
Mr. M. D. Davidson has been appointed principal of the North Sydney schools, N. S., with Mr. W. E. Haverstock as vice-principal.
The Sussex, N. B., school trustees have decided on a well chosen site for a new school building, which will be commenced in a short time.
Mr. H. A. Prebble has been appointed principal of the Hampton Village, N. B., school, in place of Mr. Weldon U. Pickel, who has gone to the Northwest. Miss Frances Prichard, of the Hampton Station sehool, has resigned 10 take a year's course in nature study at Guelph, Ontario. She is succeeded by Miss A. Beatrice Hoskin.

The Westmorland County, N. B., Teachers' Institute meets at Dorchester on the 5 th and 6 th October. A full programme will be found on another page.
Dalhousie College, Halifax, has established a central evening school at Stellarton, N. S., for the instruction of classes in mining and engineering.
Netherwood, the Rothesay, N. B., School for Girls, has opened with the largest number of resident students in its history.
Mr. Joseph Howe, who has been a prominent figure in Acadia College athletics, has been appointed teacher in Horton Academy, Wolfville.
The idea of central schools is growing in New Branswick. The rate-payers of Hampton and Hampton Village recently voted for consolidation; seven districts of the parish of Springfield have united to form a school at Belleisle Creek; two distriets in Dorchester parish have united; and the new consolidated school at Riverside has opened with over 200 children in attendance, who, with the parents and teachers, are delighted with the new edueational conditions.
Principal Barker, of Fredericton, has taken charge of the St. Martins, N. B., superior school.

Mr. A. B. Connell, secretary of the Woodstock, N. B., school trustees, has resigned, leaving a record of valuable services extending over nearly a generation.
The Charlote County teachers will meet with the St. John teachers on the $12 \mathrm{th}_{1}$ and r 3 th, as will be seen by advertisement on another page. Both railways offer reduced rates.

Rev. C. Brockwell, curate of Cheshunt, Eng., has been elected to the new chair of divinity at King's College, Windsor, N. S. He will take part of the work that has been done by Professor Vroom.
The new session of the institution for the Deaf and Dumb at Halifax has begun, and Principal Fearon would be grateful for information regarding deaf children of six years or over, who have not yet come under instruction. This school is empowered by acts of parliament to admit pupils from all parts of the Maritime Provinces, also from Newfoundland.
Mr. F. S. Small has resumed the principalship of the Apohaqui, N. B., superior school, with Miss W. A. Toole as associate teacher. Miss Toole has recently taken a course in nature study at Guelph, Ont., and an advanced course at the N. B. normal school.
Miss Kathleen Cockrell, of the high school, Victoria, B. C., is an exceptionally brilliant student, as the following record will show: Last year she stood at the head of all the candidates in British Columbia. This year, in the wider field, where she had the entire Dominion to compete with, she stood second on the list, being exceeded by one only, a young man who has been a student of Upper Canada College at Toronto for some years. Out of a possible 600 she made an aggregate of 507 , or an average of 84 in all subjects. The young man who stood ahead of her made an aggregate of 515 out of a possible 600 , thus leading her by eight points only. There were about 280 candidates in all. Miss Cockrell has just passed her sixteenth year, which is the youngest age at which students are admitted to McGill. Congratulations to Principal Paul and the Victoria high school staff on the success of their clever pupil.
The prospects at Mt. Allison University, Sackville, are pethaps more encouraging than they have been at any previous year in its history. At the Ladies' College, there are more students than at the opening last year. The Academy has a much larger attendance than last year. The University residence promises to be full, notwithstanding the provision of thirty-six new rooms in the fourth floor of the residence.
The P. E. Island Teachers' Association met at Charlottetown on the 27th, 28th and 29th September
Sir William C. Macdonald and Professor James W. Robertson, after their visit to Kingston, N. B., went to Middleton, N. S., to visit the consolidated school at that place. At a public meeting on Monday evening, September 1 th, Dr. A. H. MacKay plainly intimated to the people that they must expect no assistance from the government, but must depend on themselves after the Macdonald gift had been expended. At present the average amount throughout the consolidated district is about half the average sectional assessment of the province. Dr. Robertson excelled himself in his plea for a better education for the children. He stated that if the consolidated section would raise instead of about forty cents on the hundred, as at present, the amount of $\$ 1.50$ on the hundred, or equal to the average of the highest county in the province, Sir W. C. Macdonald would stand by the school for three or five years longer.

The Restigouche County teachers' institute will meet in Campbellion on the 12th and 13 th of October.
The Albert County, N. B., teachers' institute will meet in the consolidated school building, Riverside, on the 5th and 6 th of October, and the Westmorland and Northumberland 'Counties' institutes will meet on the same dates.
Fortunately it is seldorm that we have to record such a vicious and apparently unprovoked assault as that made recently on the respected principal of the Sackville high school, Mr. A. D. Jonah. A boy was disobedient and Mr. Jonah punished him by pulling his ear, but not so as to cause any serious injury. The father assaulted the teacher on the public street, striking him violently in the face several times, for which he was fined $\$ 20$ or two months in jail. This is considered a light punishment for a serious and brutal offence.
Arrangements are being completed for the consolidation of Hampton Village and Hampton with a few of the outlying districts in one central school.
A party of eight teachers from Nova Scotia left Trurn last Thursday for Guelph, Ont., to take the full course in nature study at the Ontario College of Agriculture. The party consisted mainly of young ladies.
Dalhousie University opened on the 13th September with a large number of students in excess of last year's registration. The following are winners of bursaries: Miss Thompson, of the Halifax county academy, first scholarship, for first-class distinction, junior matriculation; J. Congdon Crowe, Truro (Colchester county academy), second scholarship, for second-class distinction.
Professor Harold Geoghegan, of Trinity College, Dublin, has been appointed to the chair of English literature and modern languages at the University of New Brunswick. He has a fine record as a scholar and experienced teacher, and comes to his new position with very high testimonials. Lectures begin at the University on the 2nd of Octoher, and the formal opening took place September 28th.

Miss Katharine Wisdom, of St. John, a distinguishet graduate of McGill University, and recently a teacher in the Ottawa Ladies' College, has been appointod to a position on the teaching staff of Trafalgar Institute, Montreal.
The fiftieth anniversary of the founding of St. Francis Xavier College was celebrated at Antigonish, N. S., during the first week of September. Delegates from sister colleges throughout Eastern Canada, and many former graduates and distinguished visitors, graced the oceasion. There was a feeling of just pride in what the college has accomplished in its fifty years of endeawour, and hope for a still ligher attainment in the future. A notable figure in the celebration was the venerable Bishop Cameron, now nearing four score years. He has been with the college from its beginning, and is now chairman of the lonard of governors. Among the honorary degrece eonferred were the following: LL. D. on A. H. MacKay, Superintendent of Education for Nova Scotia; Rev. Dr. Forrest, president of Dalhousic College; Mr. David Soloan, principal of N. S. Normal School; Mr. Samuel N. Robertson, principal of Prince of Wales College Charlottetown; Dr. E. M. Kierstead, late of Acadia College; Dr. Falconer, principal of Pine Hill College, Halifax.

## RECENT BOOKS.

Maid Margaret of Galloway. By S. R. Crockett. Cloth. Illustrated. Pages 417. The Copp, Clark Company, Toronto.
This book takes the reader back to the times of the Douglases and early Stewarts in Scotland, the days of border feuds, when great personal strength and prowess, skill in archery and the broadsword won the victory on many hard-fought fields. The narrative carries the interested reader through exciting scenes and bright descriptions of Scottish scenery: Lack of judgment is shown in prolonging the story after it is finished. The story really ends with the capture of the castle of Thrieve-the final stronghold of the Douglases.
In Blackie's English School Texts we have received Sir Walter Raleigh's "Discovery of Guiana" and Swift's "Qulliver's Travels," each with introduction, carefully edited text, good print, and bound in cloth covers. Price 8d. each. Blackie \& Son, London.
In "Blackie's Little French Classics" series we have Voltaire's pretty story, "Le Blane et Le Noir," with an introduction containing a brief sketch of the author and his times. Price 4d. Blackie \& Son, London.
Mihton's Pakadise Lost. Book V. Edited with introduction, notes and appendices. By Albert E. Roberts, M. A. Cloth. Pages 84. Price is. Blackie \& Son, London.
A convenient pocket text-book, with a helpful series of notes, and appendices showing the structure of Milton's verse.
Tales from Spenser. School Edition, with introduction, notes, glossary. Linen. Pages $\mathbf{1 6 7}$. Price is. Macmillan \& Co., London.
The book contains such deserving-to-be-known stories as Una and the Lion, Una and The Prince, Una and the Dragon, Britomart and The Mirror, How Britomart Found Artegal, and others, told in modern English prose.
L'Anniversaire de Blancie. By Clémence Sannois. Cloth. Illustrated. Price is. Blackie \& Son, London.
A series of bright little juvenile scenes cast in a story in which the author has conceived the happy idea of huilding up a working vocabulary of everyday French around the nake-believe operations of "playing at house."
Lat Premiere Annee de Frincais. By T, B. Kirkmin, B. 1. (Oxon.) Cloth. Illustrated. Pages 200. Price 2s. Adam and Charles Black, Soho Square, London, W.

This is an introductory lirench reader on a plan as novel as it is interesting. The text deseribes. in the form of dialogue, narrative and verse, a day passed by an English lony in a French family at Paris, a choice of subjects which puts the vocabulary to be taught in a thoroughly French setting. It is divided into three parts; the premiere partie, which describes the morning at home, lessots, meals, etc.; the deuxieme partie, describing an afternoon spent in Paris, sight-seeing, shopping, playing, all illustrated from photographs; troisieme partic, an evening at home, stories and songs. Ten prelimimary lessons on classroom terms precede the use of the text, which, with "1.esson Notec," exercises, vocalmlary, make up an execllent introduction to the study of French.

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## OFFICIAL NOTICE.

New Brunswick Board of Education.

Manual Training Courses.
Training courses for teachers desirous of qualifying as licensed Manual Training instructors will be held at the Provincial Normal School during the session of $1905-6$ as follows:

$$
\text { Short course.-September } 18 \text { to December 22, } 1905 .
$$

Full course.-Jannary 8 to June 29, 1906.
The short course is intended to qualify teachers for the license to teach Manual Training in rural schools. Candidates for admission must hold at least a second class Provincial license, and be prepared to furnish evidence of their teaching ability.

The full course is intended to qualify teachers for the license to teach Manual Training in town schools. Candidates for admission should hold a first class license, but teachers holding a second class license, and having a good teaching record, may be admitted on their merits.

In each course, students showing little aptitude for he work will be advised to discontinue at the end of one month from the date of entrance.

Tuition is free, and the usual travelling allowance made to Normal students will be given to teachers who compleie their course and proceed to the teaching of the subject in the Public Schools of the Province.

## Housfhold Science.

No provision exists at present in the Normal School for the training of Houschold Science teachers, but certain institutions have been approved by the Board of Education as training places for New Brunswick teachers desiring to qualify as licensed teachers of the subject.

Full particulars of the several courses outlined above may be obtained from the Director of Manual Training,

T. B. Kidner,<br>Fredertcton, N. B.

## Approved:

J. R. INCH,

Chicf Superintendent.

# The Educational Review. <br> Devoted to Advanced Methods of Education and General Culture. 

Published Monthly. ST. JOHN, N. B., NOVEMBER, $190 \overline{5}$.

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G. U. HAY,
    Editor for New Brunswack.
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We direct attention to the advertisement in another column of the vahable prizes offered by Lord Meath and the League of the Empire for competition in all schools of Great Britain and the Colonics. It is hoped that New Prunswick schools will be heard from in this competition. The sul)jects are suggestive. It would be a great honour to win a prize in competition with all the sehools of the whole Empire.

The Educational Monthly, Toronto, contains a reference to the late John Miller, by whose death on the 2 nd of Octoher Ontario loses one of its leading educational men. For the past fifteen years he had been Deputy Minister of Education, and was president of the Dominion Teachers' Association.

Tine late L. P. Fisher, of Woodstock, N. B., whose property amounted to nearly half a million dollars, left ample funds for establishing a public library, a well equipped modern school building, the mucleus of a superamuation fund for teachers, and other bequests for the improvement of the townspeople. A noble example.

In this number of the Review is begun a series of reproductions of the pictures of famous artists to serve for school decorations, subjects for composition, etc. Rer. Mr. Boyd will furnish notes for these pictures as they appear, and Mr. T. B. Kidner, in the next number, will give directions how they may be framed inexpensively. Mr. Boyd's art notes in this number will be found very helpful and interesting.

Thes union of Baptist and Free Baptist denominations in New Branswich, now happily consummated after months of careful consideration, will no doubt be followed by a similar union in the other provinces of Canada. The two weekly papers which have been the organs of these two bodies-the Messenger and I'isitor, edited by Rev. Dr. S. Mccully Black, and the Religious Intelligencer, by Rev. Dr.Jos.McLeod-have become one, which will in future be published as the IFaritime Baptist. The mion of these two excellent weeklies, with such gifted editorial writers as Dr. Black and Dr. Mefocod, will make the minted paper of exceptional strength and interest to the demmination.

True introductory sketch on Plysical (ieography by I'rofessor Bailey, which appears in this number, will have many interested readers anmog those teachers who feel dissatisfied with their results in teaching geograply. I'rofessor liailey opens to their view an alsorling and fascinating course by which gengraply can be made a live, interesting subject in accord with the nature-stury of our schoots. This preliminary skech will be follow ol be a series of articles on this surbject.

## School Correspondence.

The Review has frequently spoken of the value to our schools of pupils corresponding with the pupils of other schools in different parts of the empire. The advantages of such correspondence are many : there is the incentive to do one's best in writing such letters; there is the interest in receiving answers from Britain and distant parts of the Empire; there is the closer comradeship of our English-speaking boys and girls, and there is the additional stimulus of studying the history, geography and customs of these places.

It may not be generally known to teachers that there is a "Comrades Correspondence Branch" to the imperial order of the Daughters and Children of the Empire, the object of which branch is to promote correspondence among schools and inspire an educational and friendly interest $i_{1 n}$ the Empire as a whole, and in its different parts. The work has grown very rapidly in the three years since it was established. There are boys and girls in the sehools throughout Canada whose "comrades" are in Great Britain, South Africa, Australia, Ceylon, and the West Indies, and the interchange of school letters is very interesting and instructive, comprising descriptions of the scenery, home life and sports in many different lands.

Another, and quite a different department of this correspondence work, is the school-linking scheme which consists in joining any one of our schoals with another in any part of the Empire. The schools are supposed to be working under similar conditions, as in country or in city, and the correspondence is continued while it is mutually profitable, the letters leading. in many cases, to the exclange of post-cards, specimens, essays, ete.

Teachers who wish to have their schools linked with others in this correspondence may write to Mirs. G. C. Vanwart. Fredericton, or to the secretary of the Canadian branch, Miss Mabel Clint, 31 York Chambers, Toronto.
G. M. Duncan, M. D., once the efficient teacher of the Bathurst Village superior school, and for more than a score of years the secretary of the board of school trustees, which duties he has discharged with intelligence and a regard for the weltare of teachers, writes as follows: "I enjoy each number of the Revimw. It is worth three times its modest price to any go-ahead, up-to-date teacher, or one who wishes to be such. Its liints and advice are worth years of experience."

## Nature-Study.

Hints for November Talks.
Teachers should give a few lessons now and then on the stars, especially at this season when their brightness attracts us. That large star that rises in the east shortly after seven o'clock in the evening is the planet Jupiter. Notice that it is between the V -shaped cluster below it, called the Hyades, and the group of six bright stars above, called the Pleiades. Get the pupils interested in this planet by asking them to observe which group it has drawn nearer to after a week or ten days. Because it changes its place with regard to the other stars proves that it is a planet, and not a fixed star. Have the scholars make drawings every few days of the Hyades and Pleiades and Jupiter's various positions, making a series extending through the month, and then have them compare the last drawing with the first. Ask the pupils to learn something about these clusters of stars and the planets, and to look up references about them in literature, especially in the Bible and in poetry. What planet is in the eastern skies now in the mornings? Prove that it is a planet by observing its "wanderings" during the month among the early morning stars near it. Is the moon a planet? Watch its progress through the sky during this month for the proof.

Did you draw the attention of your scholars to the varied colours of leaves in October? Which trees had scarlet leaves? dark-red? brown? goldenyellow? Which trees were the first to shed their leaves? which next? What trees or shrubs (deciduous) still have their leaves on? What tree with small needle-shaped leaves is deciduous? What change of colour took place before its leaves fell? What advantage is it to trees to shed their leaves? Pick up some of those leaves that have fallen and examine them. They are withered and dry, and you can easily crush them between your thumb and finger. What has become of the soft, pulpy mass that made up the substance of the summer leaves? Why did the leaves fall? Was it because of the frosts? of the winds? Did the summer (strong) winds tear off the leaves? Leaves fall when their work is done, whether in midsummer or autum:1. Examine branches where leaves have been and notice what has helped to push them off. Does the leaf leave any mark to show where it was attached to the twig or branch? What other marks do yous observe on twigs or branches? What do they mean? Someone has said that the beginning of
the year is now rather than in spring. Can you give any good reasons for this statement? Examine trees, shrubs and the ground beneath them for any proofs. If you find any buds beneath the dead leaves, be sure to cover them over again.

Look this month for the bright scarlet berries of our Canadian holly (Ilex), which can now be seen, about the size of peas, close to the twigs after the fall of the leaves. They are worth looking for, and when found are a delight to the eye. These with the haws of the thom and the hips of the roses make very pretty decorations.
watch for and enjoy those bright Indian summer days that nearly always come in early November after the fall of the leaves and after nights of severe frost, Sometimes the Indian summer lasts for a day or two, sometimes it is prolonged into a weck or more; occasionally we have a succession of summer days at intervals between cold north winds and frosts. Read the description in Longfellow's Evangeline, and find out what other writers have said about this all too brief and charming season. The blossoms of the witch-hazel may be found at this season in low thickets or along streams. The yellow flowers of this tree or shrub, which give a bright golden glow to some of our woods when everything else is dull and brown, and the scarlet berries of the Canadian holly, have been seen ',y comparatively few people, and yet both are conmon.
The birds-most of them-are gone to their winter homes in the south, many of them sojourning for a few days or hours, here and there on the way, to rest themselves where food to their liking is more or less albundant. It must not be supposed that birds leave us entirely on accomnt of the cold weather. Abundance of food is the first consideration. Many could endure the severe colds of our winters, but the snow covers their food. Of the small birds that stay with us, the chick-a-dee and the nuthatch are the most familiar. Children carn help these and other birds through the winter season by seattering crumbs round their homes or the school house, or by fastening a small picce of pork to the limb of a tree for them to come and pick at. The chic-a-dee especially will become verytame and seem to repay your interest in him by telling yon his wame in a series of confidential little "chick-a-dec-dee's." Another little bird that remains with us until very late in antumn is the golden-crown:d kinglet, so-called on account of the bright redtish orange spot on the top of its head. Its body is olise
green in colour, with under parts dull white. Flitting actively from tree to tree its only perceptible note at this season is a fine " tee-tee," only noticed by practised ears.

The recent death of Dr. Thomas J. Barnardo took away the leading English philanthropist and the man who, in all the world, has done the most for homeless children. "The father of nobody's children,", as he was called, is credited with the rescue of 60,000 waifs. He established homes for boys and girls, and no child was ever refused admission. The immates were well cared for, taught useful trades and given positions where they could earn a living. Many that were willing to go abroad were established in Canada and other colonies.

Mr. Andrew Carnegie, the distinguished philanthropist, has ordered a sjecial library edition of ${ }^{2} 00$ copies of the forthcoming volume of Mr. Wilfred Camploell's verse to present to his libraries thronghout the English-speaking world. The edition is to be called the "Carnegie Edition," and each volume will have the inscription, " I'resented by Andrew Carnegic." This is a high compliment to our distinguished Canadian poet, the qualities of whose genius the critics and readers of two continents have recognized.

## Grammar in a Nut-Shell.

The following lines may wot commend themselves to the makers of verse, bit if committed to memory they may aid children th classify parts of speech and decide for themselves where a word shonld be placed:

> Three little words you often see
> Are artieles $a$, an and the.
> A noum's the name of anything.
> As school or garden, hook or swing,
> Adjectives tell the kind of noun,
> As great, small, pretty, white or brown.
> Instead of nouns the pronomes stimel. ller head, his hand, your arm, my hand.
> Verls tell of sometling to be donc-
> Ti, read, count, laugh, sing, jump or rum.
> How dhings are done the adverths tell,
> As slowly, quickly, ill or well.
> Comjume:ions join the words together.
> As men and women, wind or weather.
> The preposition stands before
> A noun as in or through the door.
> The interjection wnws surprisc,
> As ()! han protty, Ah! how wice.
> The whole are called nine parts of speech, Which reading, writing, speaking teach.
-Exchange.

## Our Native Trees.

by G. U. Hay.

## The Birches.

The birches and alders belong to the same family (Betulaceæ). The alders scarcely rise to the dignity of trees. They are very common, especially along shores or low grounds, where they often form close thickets. They are sometimes appropriately referred to as weed-trees or shrubs. The birches also grow in great abundance in these provinces, forming in many places the largest proportion of our deciduous trees. $I_{11}$ late autumn they give to the forests that faded yellow appearance from the changing of their leaves, the colours of which differ from the brilliant scarlet of the maples or the rich browns and reds of the beeches and oaks.

At this time of the year, if birch trees are examined, the long scaly upright buds may be seen, which are destined to become the branches and twigs of the next and future seasons. The catkins, which are formed during the summer, at the same time with the buds, may also be seen in twos or threes on the twigs or smaller branches. The catkins contain the simplest kind of flowers,- the staminate catkins longer than the others and usually in threes, have stamens, and the shorter pistillate catkins, usually in twos, contain little pistils, which during the next season may have seeds with narrow wings, which enable them to be carried far and wide by the winds. The staminate catkins becone long and drooping, and of a rich golden colour in the early spring, and their pollen is carried by the winds to fertilize the pistillate flowers, before the leaves of the birch are mololded. So it happens in most of our deciduons trees that the flowers unfold in spring before the leaves. Do you see why?

There are two kinds of white birch, which are frequently found growing together. They are usually very readily distinguished apart. Both have white bark, but in one the bark is very tough and durable, splitting in paper-like layers. This is the canoe-birch or paper-birch (Betula papyracea). In parts of our northern forests it grows to the height of sixty to eighty feet, with a trunk diameter often from two to three fect. Only in the most remote forests can the canoe-birch be seen of a large size and in all its native beanty. This tree well cleserves the mame that poets have given to it--"The Lady of the Woods." It extends farther north than any other decidunus tree. Its leaves are ovate in outlins, taper-pointed. heart-shaped or abrupt at the base. doubly serrate on the edges, and of a dark
green colour above and pale beneath. Its wood is hard, strong, light in colour, but becoming a red-dish-brown with age. Its weight is thirty-seven pounds to the cubic foot. Its bark is chalky white, impervious to water, very useful to the Indian who makes his canoc and wigwam from it, and uses it for various ornaments which please the white man's fancy. Its wood is much used for fuel and for furniture and like purposes.

The other white birch is smaller, and found more frequently on poorer soils near the coast, hence its name of poverty birch, old field birch. Its greatest beight does not exceed forty feet, and its slender trunks, usually growing in clumps, scarcely exceed a foot in diameter when at their greatest size, which is seldom attained in these provinces. Its bark is chalky white, and does not separate in layers like ${ }_{1 i}$. canoe birch. The scientific name of this, the American white birch, is Betula populifolia, since its leaves resemble those of the aspen poplar, and as they are on long slender stalks they tremble like the leaves of that tree. They are triangular, smooth and shining on both sides, and very long pointed. The wood of the American white birch is softer than that of the canoe birch. The weight of a cubic foot is thirty-six pounds. Its wood is used for spools, shoe-pegs, barrel hoops, and for fuel.

The yellow or gray birch (Betula lutea) is one of the largest, if not the largest, decidnous tree of Canadian forests, frequently attaining in its maturity a beight of from eighty to one hundred feet, and a trunk diameter of from three to four feet. Its bark is a yellowish, silvery-gray colour, separating from atd often hanging on the tree in thin satiny layers. The leaves are ovate and usually more narrow toward the base than those of the white birches. The graceful form of this tree, frequently dividing into smaller stems above and assuming a rounded or hemispherical form, makes it desirable for ornament and shade. Its lumber is valuable for many purposes. It takes a fine polish, which makes it beautiful for furniture. It is used ins the manufacture of agricultural implements; for the keels, lower timbers and planks of ships; for piles, foundation timbers, and sluices, being almost indestructhe under waters. It is excellent for fuel, burning readily and producing a great heat. The wood is hard, strong. light brown in colour, and a cubic foot weighs forty-one pounds.

The cherry or sweet birch (Betula lenta) grows in much the same situations as the yellow birch, namely, is moist rich woods. Its twigs and bark
are more aromatic and bear a resemblance to the garden cherry tree. Its bark is dark brown, and does not readily separate into layers, beconing furrowed with age. Its timber is a beautiful dark brown, sometimes rose-coloured, fine-grained and very valuable for timber. A cubic foot weighs forty-seven pounds. The wood of this birch is even more serviceable for the uses described in the yellow birch, being heavier and well adapted for ships' timbers and all purposes intended to withstand the ravages of water.

In discussing the vertical system of writing, its opponents always seem to assume that writing is taught exclusively for the use of banks, mercantile houses and offices. But, a great majority of the people-farmers, mechanics, laborers, etc.-have no ledgers to keep, and need a knowledge of penmanship merely that they may be able to write letters in a neat, legible manner. In considering the relative value of systems, the opinions of business men must of course be given weight, but it should be remembered that in the arranging of courses of study the needs of the greatest number of our people must be constantly kept in view.-Westorn School Journal.

> "Hearts like doors can ope with ease To very, very little keys;
> And don't forget that they are these,
> 'I thank you, sir,' and 'If you please.'"

The world is so full of a number of things
I'm sure we should all be as happy as kings.
-Robert Louis Steaenson
A penny saved is a penny earncó,
And word by word is each lesson learned.
The sun is not abed, when I
At might upon my pillow lie;
Still round the carth his way he takes,
And morning after morning wakes.
While here at home, in shining day,
We round the sumny garden play,
Each little Indian sleepy-head
Is being kissed and put to bed.
And whon at eve I rise from tea.
Day dawus beyond the Atlamtic Sea:
And all the children in the West
Are getting up and being dressed.

> -Robert Leuis Steacnson.

Aled sonn, too soon, around the cumbered caves
Shy frosts shall take the creepers by surprice.
And througly the wind-touched reddening wools shall tixe
October with the rain of ruined leaves.
-Arclibald Lampinan.

## The Lady of the Lake.

Principal G. K. Butler, M. A., Malifax, N. S.

Sir Walter Scott (1771-1832).
[At the age of eighteen months Scott was seized with a disease of one leg, which rendered him lame for life. He received part of his education with a private tutor, and afterwards went to the high school at Edinburgh. Contrary to a prevailing opinion, he was not a dull boy at school. He did not especially distinguish himself, however, and was fonder of leading a raid against the boys of another school, or of collecting around himself a few companions and relating long stories of Border forays, real or imaginary. Possessed with a marvellous memory and a voracious appetite for reading, he carly filled his mind with that out-of-way knowledge which is found in his poems and novels.

He spent one or two terms at the university, and then entered his father's officc as a clerk, at the same time studying law with the successful intention of becoming a barrister. During this time he and his boon companion made many expeditions into the neare Highlands, "the Lady of the Lake" country. In Red Gauntlet he gives us a picture of himself at that period of his life.

- After a few years' practicc at law he became sheriff of Selkitk, which position he held till his death. Later again he became clerk of the scssions at Edimburgh.
$H$ His great ambition was to become founder of a family. He purchased a small estate on the Tweed, which from time to time he added to. His mansion, Abbotsford, at first of quite humble pretensions, was enlarged to almost a palace. Here for the seven or eight most prosperons years of his life lie dispensed the hospitality of a prince. No bore, however tromblesome, no lion-worshipper, however offensive, cuer received anything but the most polite treatment.

Owing to his too great trust in the Ballantynes he became deeply involved. In 1825, when the crash came, lie set to work at the age of fifty-four to pay off his debts. From that time until overcome loy paralysis his life was one incessant round of toil, and if ever a man worked himself to death, Scott did.

In 1831-32 he took a tour of the Mediterranean in a British ship of war, which the govermment placed at his disposal. This was to see if change of climate would restore him to some degree of health. but it failed, and he gradually grew worse. Ite died in September, 1832.

It is impossible in limited space to give an estimate of him. Kead his poems, read his novels, histories, eritical essays. Read his life by his son-in-law, Locklatt. If then your admiration for the man has not become intense, the literary side of your character is lacking. How many men ever lived who conld dictate a novel like "Ivanloe" lying in bed racked with pain, which at times became excruciating? This Scott did.

None of Scott's descendants of the male line are living. The family seat is now held by the descendants of Lockhart.

Scott began his literary work ly translations from he Corman, after which be published the " Minctrelcy of the Scottish border" in isoz-3. Wlis first great puemp was the "Lay of the Last Minstrel." published in 1805, follow
ed by "Marmion," 1808, "The Lady of the Lake," 1810. Beginning in 18i4, he published the Waverley novels for the next eighteen years.]

Having read the poem over as an introduction to its study, it would be well to see if any differences between it and "The Deserted Village" can be found. Its character, a story; its metre, etc. Goldsmith wrote to keep the wolf from the door; Scott, using the same figure, wrote to make his door a more ornate one. Scott practically never revised his work, and in that respect is a poor example for those of us less clever than he.

The poem opens in this selection at the close of the first day. It might be well to have a complete edition for reference.

Page I4.-I.* From what is figure taken? What figure is it? 3. Why apply adj. "purple?" What would you call "spire?" 4. What figure? 9. "Shooting" refers to what? 12. What names do we give "grey birch" and "aspen?" 13. Why call the oak "warrior?" 14. Here is a figure. 16. Find objects of verb "flung." 18 . Those who are familiar with boats may not be able to connect "athwart" with another word commonly pronounced quite differently. 19. "White peaks," be careful at this point. What season of the year is it? Are Scotland's mountains very high? 23. What part of speech is "wondrous?" What word is commonly used in its place? Word study, etc.: Flinty, ravine, abruptly, thunder-splintered, pinnacle, quaked, rifled. What is this page a description of? Watch Scott's descriptions of scenery, and see whether they are those of a man who kno vs what he is writing about.

Page 15.-1 ct seq. How does the hunter get out of the glen? What does he catch sight of as he reaches the top? 9. Compare this line with 1.4 of page 14. Io ct seq. What kind of lake is Katrine? regular, wide, etc., or the opposite? What river flows througl it? In what part of Scotland is it? Those who have the time and opportunity (teachers, I mean) may improve their powers of teaching this by reading the earlier part of Lockhart's "Life of Scott." 16. "Sentinel" is what part of speech here? I7 et seq. Put these in four or five simple Englich prose words. 30. "Skiff," what else does he call it? Word study: Nice, ken, broom, airy, crags, knolls, wildering. wound. eddying.
l'age i6.—3. 4. What figures? 13. Why "Gercion" art rather than any other? 10, 20. Put these in every-flay Finglish. 32. What does he mean by

[^3]" mountain tongue?" Why apply adjective "silver" to them? Word study: Leave, brake, strand, chisel, mood, hare-bell, accents, sword, plaid.

Page 17.- 1. Parse "birth." IO, II. How could you tell Ellen's kindness and worth from her eye? 26. "Impatient," etc. What does this mean? 27. "Gale" is not used in its usual meaning. What does it mean here? What usually? 30. Pars: " while." 32. Why "less resolutely?" 37. "Shallop" was first called what? Word study: Spy, shaggy, gnileless. filial, indignant, hazel.

Page 18.-7, 8. Why not? Word study: Prune, wont, proscribed, reassured, secluded, stalwart, fidelity, weal, woe, pibroch.

Page r9.-I. Ben-ledi, etc. What figure? What was the "Cross of Fire?" 7. "Young waters," Why apply this adjective? Of what river is the Teith a tributary? 'What lakes does it pass throngh? 14. What is the meaning of "sympathetic eye?" How can one's eye reel? Word study: Outlawed, alliance, fatal, coronach, stripling, sable, strath.

Page 20.-Here we have several different names for the "Cross of Fire." Why is each appropriate? 3. Pole-axe, what was this? 9. Why "as if in parting life," " parting" here as in " Deserted Village," "where parting life was laid." " Drowning men catch," etc., finish the proverb. II. "Opposing" is here used for what word in common use? Word study: Torrent, tide, strained, hamlet, adherents, augury, confidence.

Page 2s.-4. Why " Saxon?" 8. Compare "gale" here with the same word already used on page $17,1.27$. 5 . What is the meaning of "space and law to the stag?" Word study: Fray, gestures, imbrued, crest, favour, embers, basked, beset, beast of game.

Page 22.-3. Does the sporting Englishman now trap the fox? How does he get him? Is he now allowed " law and space?" 4. "Thus" how? 9. How "write it on their crest?" II. How did a knight win his spurs? 17. "Hardened" how? Beef treated in the same way is called what? 26. 27. What augury was laid upon his fate? 28. Look up past tense of "wind," page 15, 1. 25. 35. Look up first part of complete poem and find passage beginning: " Such then the reverence," etc. Word study: Recked, mark, cheer, clansman, avenging, assail.

Page 23.-6. Meaning of this line? 15. Another* way of indicating time. Notice that he never speci-
fies exact time, such as saying it was now five o'clock. Pick out different ways of marking time. 18. "Deep" is not usually applied to a lake, but to the? 21. Why "hollow path?" 23. Compare " Horatius,"

> "In yon strait path a thousand May well be stopped by three."
30. Is this line connected with "He sought these wilds," or "traversed by few?" 31, 32. What does Fitz James mean? Word study: Myself, stock, ward, ford, lullaby, heath, wreath, twined, hardihood, trace, abating.

Page 24.-6. Figure? Does the mist hang over the hill? Compare Evangeline: " And mists from the mighty," etc. 7. The chief's name? Why dangerous? Look up page 21. 10. Ask for meaning. A line which admits of different interpretations. 1r. Parse "since." Is it time or canse? 18. This line will help to fix correct pronunciation of "again." Word study: Sooth, yon, vowed, swain, curlew, bonnet, lurking. shingles, bracken, tuft.

Page 25.-6. "Beck," we use a longer form of the word. 12. Meaning of "step forward flung?" 22. "Manned himself" means? 26. Parse "come." 29. Why "respect and surprise?" 3 r. Is an example of what figure? 32. Parse "space." Word study: Subterranean, verge, Dhu, bracken. osiers, copses.

Page 26.-12. "Witness" has not the usual meaning here. 17. Why "that I need not say?" 24. For a fuller description of "every vale" consult complete edition Canto v, stanza vii. 26. What figure? 27. Case of "path." 31. Name of torrent? Word study: Pennon, glinted, glaive, targe, jack, apparition, delusion, ford, Gael. trust.

Page 27.-2. What clan? 10. Meaning? 26. Meaning? 28. Who was Red Murdoch? 29. What figure of speech? 31. What James? Word study: Ruthless, ward, vantageless, fend, grace.

Page 28.-1. What figure? 3. What "kern" had he slain? When? Why? 4. Difficult. Ask pupils for meaning; send theirs and your own to writer of these notes. Io. What is a carpet-knight? What other kind of knight do we sometimes meet in literature? 15. How can Roderick's words "steel " a sword? 16. Whose braid was it? How came Fitz-James to have it? 23. He afterwar!s proves this. When and how? 22. Why " dubious?" $3^{8}$. How can a sword bee a "shield:" Word study: Truce, ruth, cairn, falchion, brazen, wield.

Page 29.-6. Figure of speech? 7. Study word "tide" in its various uses. I3. "Invulnerable," look up in dictionary and see if it has just its ordinary meaning. 25. Compare " Horatius," 1. 376, "Like a wild cat mad with wounds."
29. Who says this? Word study: Flint, war, tartans, lea, recreant, toil, clotted. Which of these is not the common word with same spelling?

Page 30.-3. What figure? Compare "tide" with same word on preceding page. James of Douglas is connected with one of the other characters of the story. Word study: Ill (parse this word), odds, guise, high, burgher, applauded.

Page 31.-5. Meaning of "chime" in this line? Word study: Lay, escaped, melody, stout, fancy, frames.

Page 32.-5. Meaning of word " presence?" 7. "Whose will was fate," means what? s6. "Sheen" is what part of speech? 19. What was his title? 20. What do we call a " snow-wreath?" 25 . Where had Ellen got the ring? When? From whom? 30. I'arse "Fair." 33. "Fealty," for this read up the "Feudal System." 38. What part of speech is "wrong?" Word study: Acrial, port, plume, stay, suppliant, signet-ring, even, slanderons.

Page 33.-I. "Vulgar crowd." Compare "thou many headed monstrous thing." For Scott's own opinion of the "vulgar crowd," read his life towards the last, when the agitation for the reform Bill was going on. 5. Who was "Bothwell's Lord?" 6. What figure of speech? 7. Meaning of word "infidel" here? 16. What figure? 21. Compare 1. 26, p. 27. 23 et seq. Look up life of James if possible. 4o. What is a "talisman?" Word study: Confirm, proselyte, veils, insulted, glaive.

Page 34.-4. What was "the weakness of her breast?" Compare p. 17.1.25. 13. "Parting," again for? Word study: Conscious, probed, ire. wile, ontlawed.
Older pupils might be induced to read some of Scott's novels. They could scarcely employ their spare moments better.

Vancouver, the largest and most prosperous city on the Canadian Pacific coast. has a population of 45.000. What cities of the Dominions equal it in population? What cities exceed it?
"Your paper comes as a welcome monthly visitor, and a careful reading of its columnss cannot fail to le of value to any teacher.'
G. S.

THE OLD TÉMÉRAIRE. From a Photograph of Turner's Painting.

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## Art Notes - No. I.

By Rev. Hunter Boyd, Waweig, N. B. The Fighting Téméraire Tugged to Her Las: Berth to be Broken Up, 1838.
"The flag which braved the battle and the breeze, no longer owns her."
Exhibited at the Acadeny in 1839, with the above lines cited in the catalogue. Of all Turner's pictures in the national gallery, this is perhaps the most notable. The subject of it was suggested to Turner by W. Clarkson Stanficld. They were going down the Thames by boat, to dine, perhaps, at Greenwich, when the old ship, being tugged to her last berth at Deptforl, came in sight. "There's a fine subject, Turner," said Stanfield. This was in 1838 . Next year the picture was exhibited at the academy, but no price was pul upon 1t. A would-be purchaser offered Turner 300 guineas for it ( $\$ \mathrm{I}, 500$ ). He replied that it was his ". $200-$ guinea size " oplly, and offered to take a commission at that price for any subject of the same size, but with the "Témeraire" itself he would nut part. Another offer was subsequently made from America, which again Turner declined. He had already mentally included the picture, it would seem, amongst those to be bequeathed to the nation; and in one of the codicils to his will, in which be left each of his executors a picture, to be chosen by them in turn, the "Téméraire" was specially excepted from the pictures they might choose.
[Nore.- Let the teacher explain to younger pupils what is meant by the "original," in this instance a very large oil-painting, cuclosed $i_{11}$ a massive gilt frame.]

## Tile Téméraire.

The "Téméraire," second rate, ninety-eight ぬunc, was named after an older " Téméraire," taken by Admiral Boscawen from the French in 1759. It the battle of Trafalgar, she was next to the "Victory," and followed Nelson into action: commanderd by Captain Eliab Harvey. IIer masts were an damaged as to render them mnfit to carry sati, and her rigging of every sort was cut to pieces, but when she was sold the vessel was rigred temporarily, and Turner painted her as he saw her. The vessel loomed through the evening haze pale and ghostly. as she was being towed to her last moorings at Deptford by a little fiery, puny steam-tug. I $\mathrm{I}_{11}$ consequence of the prominent part the "Temeiratre" took in the battle of Trafalgar, she was calle.l among the sailors " the fighting "Téméraire." and

Turner called his large, beautiful and poctical picture by that name when it was first exhibited. But when the plate was engraved for the Royal Gallery of British Art, and it became necessary to give a brief history of the ship, the pet title was dropped. and it was called the "Old Téméraire."

Criticism of Turnier's Original Painting.
To those who have seell only photographes, of small prints in the Perry or Brown series, it may be difficult to serionsly accept the estimates that have been written upon the famons picture in the National Gallery.

The teacher has to take these descriptions on trust, and must not be surprised if the scholars find little to evoke their enthusiasın. Hut a small print in black and white affords sufficient material for close scrutiny. and the clitd's imagination may be appealed to with considerable suecess if an appeal be made to the principle of association. Einpuire abont local rivers, or rivers secn during holidays, and bring out any facts eoncorning large woolen shins, and the form atd use of steam tugs. Nach will be gatined if the scholars can be indueed to observe sunsets, and especially the effect of stmset 1 pon a sheet of water. Makc enyniry concerning "buoys" and "spars" and other nantical terms. Invite them also to procure pictures from magazines showing ohd wooden men-of-war, and vessels employed recently $i_{11}$ the sea of Japan. References to "hearts of oak," and similar terms, moly also be collected from literature, for instance, 1 lohnes" " ()ld Ironsides." When each element in the pieture has been expanded to actual size, and the colours of sumset effects have been recalled, the litte black and white reproduction has fulfilled its function, it is either a kind of shorthand note for those who bave visited Lomdon and examined the original, or it is an bid $i_{n}$ understanding and enjoging varions fanous deseriptions of this great pieture of the Victorian era.

There are two notable aceonnts of this painting —Ruskin's Modern I'ainters, wol. i, pt, ii. sec. i, ct. vii, and Nones on the Thrner Gallery. Also flombury's Life of Turner.

We have not space for more than a few sentences. liorst let us take TYombury. Who says: " It is the moblest bnglish penem. fonnded on limelish scene? and linglish eve: is, ever thrown on cancas. Tur-
 gonige the the wave, lut as an old warrien gomes to his rest ; and, to cellorate its aramblapoheosis, be turnerd the sky and eatoh into at ory battle-field:

burial. In the painter's eyes she then was no longer the pale ghost of her former self, but a war ship moving through the sulphurous flame at Trafalgar, with the blood oozing through her planks as the wine pours from the wine-press at vintage time. He knew, when he painted this picture, that he should touch the heart of England, because his own heart was touched as he painted it."

Mr. Ruskin says, in contrasting Turner's work, the " Ulysses," with the "Téméraire," painted at an interval of ten years-the one picture is of sunrise, the other of sunset: "The one of a ship entering on its voyage, and the other of a ship closing its course for ever. The one, in all the circumstances of the subject, unconsciously illustrative of his own life in its triumph, the other, in all the circumstances of its subject, unconsciously illustrative of his own life in its decline. Accurately as the first sets forth his escape to the wild brightness of nature, to reign amidst all her happy spirits, so does the last set forth his returning to die by the shore of the Thames." Mr. Ruskin calls attention to the exquisite precision of the lines and the nobility and pathos of the subject. Lastly, Mrs. Emery says: " The buoy and the row-boat and the white sails, all at different distances from us, help strengthen the effect of brearth in the water spaces. We involuntarily measure the horizontal distances according to the variations of these details in size and distinctness, and come to realize it is a wide expanse."

## How to Use the Pictures,

If you have access to more than one rendering of "The Old 'Téméraire,' " note carefully the difterences. Observe especially if the moon is indicated in the upper left hand corner, also the relative heights of the masts.

In any case, note that unity in the composition of the picture is obtained by focusing all the diagonal lines of the picture upon the sun. (The picture might indeed have been called "The Sunset.") Observe the receding lines of the shore, the converging cloud shadows, the " sun glade." Note also the line from the topmost mast, the direction of the smoke, and the shape of the sail alongside the tug. Invite other remarks of a similar kind, and sccure from the scholars a rough outline of the picture (from memory, without previous intimation) with these diagonals indicated in dotted lines.
N. B. - Wo not use any of the above material in the class tintil a full discussion has been held, or written accounts attempted, then invite fuller com-
positions, and propose this query: Describe the probable feclings of old sailors when the "Témérare" was sold and removed from Plymouth, the ment on the tug, and the demolishers at Deptford.

## For Reproduction.

## Two Friends.

In the Zoological Gardens in San Francisco is a big lion named Paul. There wandered one day into these gardens a little kitten. So far as this little kitten knew, there was nothing in this great big world but friendly, lovable people. The kitten went about all day in the gardens, being fed by the children, and when night came she found herself in with the animals in the zoo. She felt quite at home, for some of them were her relations-very much larger and somewhat different in shape, but still they were cousins and second cousins. In one of the cages was a big lion who was very old. The kitten, just like all lovable things, felt very sorry for the big lion, who found it difficult to stand up, and whose head was gray; so Kitty made up her mind she would be his friend; and wasn't it beautiful? Old Paul was just as anxious to be Kitty's friend. When Kitty got into the cage Paul got up and met her, and put his head down close to her, so that it was almost like a kiss. When Paul lay down again, poor tired little Kitty crawled right on his neck, and there the keeper found her in the morning. After this Paul and Kitty were the closest friends, and Kitty for several weeks slept right in the curve of the lion's neck, and in daytime crawled all over him.-The Ontlook.

## A Noble Revenge.

A farmer's horse, happening to stray into the road, an ill-natured ncighbor, instead of returning the animal to its master, put it into the pound. This is an enclosed place, built especially for stray animals, and a fine has to be paid by their owner before they are liberated. Meeting the farmer soon after, he told him what he had done, and added, " If I cver catch your horse in the road again, I will do just the same." "Neighbor," replied the farmer, " not long ago I looked out of my window in the evening and saw your cows in my field of young clover. I drove them out, and carefully shut them up in your yard. If I ever catch them again, I will do just the same." Struck with this noble reply, the neighbor went to the pound. liberated the horse, and paid the fine himself.-Sel.

## Physical Geography in the Public Schools.

Professor L. W. Bailey, LL. D., University of N. B.

Should any one interested in educational work look over the numerous catalogues issued by various publishers, especially in the line of nature stu. dies, he could hardly fail to notice the large number of works on Physical Geography now on the market. Six of these are now before me, all published since 1900 , and they are by $n 0$ means all. This would scem to indicate that the subject is attracting more attention than formerly, which perhaps is equivalent to saying that its value in educational work is being more generally recognized and taken advantage of. I also note that nearly every one of the books referred to is stated on title page or in preface to have been prepared for school (rather than university) work, which shows, I take it, that in the opinion of prominent educationists the subject may with advantage be undertaken at an earlier stage than was formerly thought desirable. Again, a comparison of the more modern text-books of this subject with those in use thirty or forty years ago, shows a most remarkable contrast, at once explaining why these great changes have been brought about. Mrs. Somerville's Physical Geography, published in 1850, is a good illustration of the mode of presentation of that time, and though full of interesting facts, and remarkable as one of the earliest examples of the capacity of the female mind to master and to systematize such facts, scarcely rises from facts to principles. Humboldt's contemporary works were broader and more impressive, as being based on personal observation, but they were largely accounts of personal travel. It is with Guyot, sometimes called the father of Physical Geography, that the subject first begins to assume a truly scientific character, as subordinating facts to principles, showing how facts are linked together, and that cvery fact or effect necessarily implies a consideration of its causes and its consequences.

Again, the text of Mrs. Somerville's work was accompanied by neither maps nor illustrations. In Guyot's "Earth and Man," though a most fascinating work, there are a few diagrams, but no illustrations direct from nature, nor any maps, though later, such maps, especially nural maps. showing the contour and relief of the continents, the course of occan currents, etc., were issued by the same author. The methods of representation employed by Guyot were not long in being adopted by the compilers of sehool geograplues, while. later, numcrous text-books treating specially of this subject
began to appear. All of these were now more profusely illustrated, but the illustrations were not always well chosen and were poorly executed, while in the accompanying maps facts or contrasts to be represented were emphasized by the employment of the most glaring and strongly contrasted colors often conveying wholly erroncous ideas. At the same time sueh subjects as oceanic or atmospheris currents, tidal movements, terrestrial magnetism, or weather changes, were represented by maps filled with lines, the number and gyrations of which were as hard to follow as wonld be those of a fancy skater upon ice. Such complicated representations only produce confusion and disgust in the youthful mind.

But a more serious drawback common to all textbooks of physical geograplyy down to a recent period was that they attempted to pour knowledge into the student instead of leading him to seek such knowledge for himself. It is in this that the recently issucd text-books show their great superiority, as especially seen $i_{11}$ such works as those of Professor Davis, of Harvard, or of Professor lirigham, of Colgate University. Not only are these made attractive by beautifnl typography and wealth of illustrations, the pietures being largely from photographs, and so clearly reproduced by the half-tone process as to be only inferior to the scene or object itself thas represented, but the student is throughout made himself an investigator through realistic exercises, or by questions which thought and observation are needed to answer. And, in order that the continuty of the book may not be thus interrupted (as is too often the ease in modern text-books. where the force of a paragraph is constantly marred by the necessity of trying to sulve the conundrums with which it is larded), a small but separate text is provided for the use of the teacher, giving useful hints as to methods, lists of books to be cousulted, questions or problems to be solved, or apparatus to be constructed. Especially is the student urged to study attentively his own environment, and to seek ont in hill and dale, forest and plain, stream and river, lake and waterfall, the soil and its vegetable output, the causes which have determined these and made each separate locality what it is.

In thinking over the subject. it has ueeurred to the writer to ask whether in the case of our provincial sehools as much attention is being given to this subjeet as is being given elsewhere or as much as might be griven with advantage. I think not. Of
this, at least, I am certain, as proved by many years' experience in teaching, that very few graduates of our schools have any adequate conception of the physical features of their own province, or of the relation of these to its origin and history. Suppose I were to ask the young matriculant just entering the university a few such questions as the following, how often would I get a correct answer, or, in most instances, any answer at all?

What proportion do the coast lines of New Brunswick and Nova Scotia bear to their consolidated area?

What influence has the extent of coast had upon the occupations and development of the people?

What contrasts are presented between the coast of the Bay of Fundy and that of the so-called North Shore? What is the explanation of this contrast? and to what results does it lead?

Why are fogs so prevalent about the Bay of Fundy, and what effect have they upon its climate?

Why should the tide rise to such different heights on the two sides of the isthmus of Chignecto?

What is the extent of the drainage area of the river St. John? the number of its tributaries navigable by steam or by canoe?

What hill ranges traverse the province? in what direction? and with what height?

Why does the St. John, arising in northern Maine and Quebec, cross all the ranges referred to and emply into the Bay of Fundy?

What is the highest land in New Brunswick? in Nova Scotia? the deepest water?

Why does much of Carleton County constitute a " fertile belt" while the tract traversed by the I. C. R. from Moncton to Bathurst is mostly a useless waste?

What useful minerals are found in New Brunswick? in Nova Scotia? and where?

Upon what canses does the climate of the provinces depend? and how does the climate influence our plant and animal life?

Such questions might be multiplied indefinitely, but what is the use of asking them if the students. have no means of obtaining an answer. At present a great want exists in this respect. No single or elementary work dealing with the plysical geography of the province exists, and it is difficult to get one published. as a good one would be expensive, and publiskers fear to undertake the venture. But there is no reason why the teachers, especially of the higher grades, should not make themselves familiar with facts of this kind, and 11se then as
opportunity offers. Our provinces, from a physiographic standpoint, are of exceptional interest. The coasts, the lakes, the rivers, the waterfalls, the hill ranges, the forests, the wild plants and animals, all afford endless opportunity for interesting and profitable study, and there is no subject which will so directly repay the efforts of those who enter upon it, or any to which young people will make a quicker or more hearty response. The teacher can easily, if he wishes, obtain or get access to the pubilcations, such as the Geological Survey reports, the Bulletins of the New Brunswick Natural History Society, and the Proceedings of the Nova Scotia Institute of Science, in which the natural features of the couniry have found illustration; he can make or get photographs of interesting localities in his neighborhood, and exchange with oihers from more distant points; he can study thoroughly some good general text-books on physical geography, and then search for local illustrations of the facts and principles therein referred to; with the aid of the same texts he can devise practical exercises illustrative of such subjects as day and night, the seasons, water erosion, curvature of the earth, etc. Still better, he can attend the sessions of the summer school of science, the very purpose of which is to direct attention to the aspects of nature as actually observed in well chosen localities, changing from year to year, and to explain the methods and results of such observation.

Of course it will be objected that there are already too many subjects in the curriculum, and that there is no time for the pursuit of another. But this idea is based on misapprehension of the facts. The subject is not a new one. It is already in the curriculum nonder the name of geography. It is only in the method of teaching it that improvement is desired. Drop the memorizing of geographical details, especially of foreign countries; direct the attention of your scholars to the features of your own enviromment, first those of the school grounds and its immediate surronindings, then those of your village, town or city; finally of your connty and province. Make your pupils understand why the school is where it is; what circumstances determined the location of your town or village; why the county lines were drawn where they are; what circumstances determined the provincial boundaries; and in what particulars New Brunswick and Nova Scotia differ from other provinces, or from other parts of the continent.

These and similar subjects do not need the setting
aside of special periods for their consideration. Much of the work is out-door work, and will make no encroachment on the ordinary school hours. It may be done in time of recess or the holidays, or on the way to and from school. A map of the school grounds may be made, which shall not only be an exercise in drawing, but, if measurements are made, an arithmetical or geometrical exercise as well. Most young people are fond of exploring the woods and streams of the district where they live, and of making maps of the latter, christening the more interesting features with names of their own devising-thus repeating what was characteristic of the childhood of the race,-and such work only needs encouragement and direction to make it fruitful. Let the teacher organize one or more excursions to points of interest with his pupils. Encourage them to make pictorial representations, or, where possib.e, clay or plaster models of what they have seen; give them prominent features thus studied as subjects for composition; base mathematical questions upon some of the phenomena observed; and, without in any way interfering with other school work, lessons in drawing, moulding, composition and arithmetic will have been given in a way evoking personal interest, while much useful information will have been gained and habits of careful observation and reasoning acquired, which will be through life a source of profit as well as pleasure. Let me conclude with the words of Professor Davis:
"All this means work, unceasing work; but work is made easy by enthusiasm and delightful by suceess. leet the teacher, therefore, persevere until the phenomena of the turning earth and the changing seasons are his familiar companions through the year; until the winds and the weather proclaim to him the great system of movements in the atmosphere of which they are but parts; tutii the waves, the eurrents and the tides swing freely through lite ocean of his imagination; and until the hills and streams commune with him as he walks by them."

## November in Canadian History.

November 7, 1885, Canadian Pacific railway hetween Montreal and l'acific Ocean completed.

November 9, 1849, first telegraphic message sent between St. John and Halifax.

November 11, 1813, battle of Chrystler's Farm. November 15, 1885. Ricl hanged.
November 19, 1899, death of Sir William Dawson.

November 30, 1812, the U. S. General Dearborn repulsed at lacolle river.

## Lesson on a Window.

What is its shape?
Or what is it made? Why not have it of paper? Wood? Cloth? Iron?

Why would not a hole in the wall answer just as well as this?

Why is it best to have it in two parts?
Why would it not be as well to have it higher in the wall? Lower?

Name some of the uses of the window.
"To let the light in."
"And to let us look out."
"To let air come in."
We use the word "ventilation" for that, Louise. (Writes the word). This means to toss in the air, and the word is from the Latin ern-ti-la-re. The root word is ientus, wind. But why shonld we ventilate our rooms?
"The air gets full of dust."
Yes, indeed. And not only that, but it gets fuil of a deadly poison, carbonic acid gas, which would kill us if taken in large supplies; and which makes us stupid even when we breathe but a little of it.
"Is that why so many people go to sleep in clurch:" That is one reason, for too many churches are shut right up after the service without being ventilated.
"Sometimes I get a headache even at home, when the windows are closed in the winter."

Our greatest danger from lack of pure air comes in the winter, for we shut ourselves up more closely then than we do when it is comfortable to have windows and doors open. Bui-who can think of something else about a window?
"If the light is two strong, we need a slade." Even that matter is often overdone, Harry. Many insects love the darkness, and disease lurks in the house that always has its shades drawn. What is the glass fastened in with? What is the man callect Who does this work? Who makes the woothoork? What is the wootwork called? You may each draw a large window, with lace curtains that are boped back from the centre; and a small one, with a fringed slate on the upper half, and six panes $n$ the lower half.
fior the spelling lesson you may use each of these words in a written sentence: glazier. putty, glase, carpenter, sash, frame, pane, ventiation, liglit, oblong, square, transparent, slade, curtain, shutter, bind. pulley, grating.-The New Education.

It is not cnough to speak, but to speak true.

## For Friday Afternoons.

In answer to a request in the October Review, several teachers have sent in selections for school entertainments and for Friday afternoon recitations, etc. We thank the correspondents for these, which will be used as occasion requires. Will correspondents kindly send, when possible, the names of the authors of the selections, so that proper credits may be given?

Mrs. Gealda H. Jenkins, of Canaan, N. S., sends a play for seven cliildren, of the age of seven or eight years. She says: "It is very preity when nicely actel. The children wear badges marked with the day they represent, which can be made very pretty with colored crayons on white paper, and may or may not carry something to represent the work done,as needle and thread, a rolling pin, etc. They come to the front one by one and stand in a row.
"I devote an hour every Friday afternoon to recitations, etc., and think it adds life and interest to the school besides cultivating a side of child nature that would otherwise be neglected."

Days of the Week.

[^4]
## Friday-

Some call me an unlucky day, I don't see why they should,

- For of they turn around and say

That I am "Friday good."
I make the beds, and sweep the floors,
The clothes I overhaul,
To pave the way for Saturday, The busiest day of all.

## Saturday-

I am the biggest work day,
I make things splash and splatter.
I scour and scrub, and rub and rub, On plate, and tin, and platter.
For I must make things nice and clean
For our dear sister guest,
The Sabbath day, of all the rest
The sweetest and the best.
Sunday-
My sisters, dear, you all are here,
Each in your proper place,
The last shall yet be first you know, And so I take my place.
On Sabbath day nor work nor play Should lise us from our duty Of serving Him who made the earth So full of light and beauty.
The children stand and sing to the tune of Home, Sweet Home:
We come one by one with our duty so plain,
And when we are gone, we shall ne'er come again;
Improve, then, each moment, each hour, each day,
For slowly but surely we're passing away.--Rcpeat.
(The children start to march out at the beginning of last line and repeat until all are out of room).

Miss Sadie Foster, Upper Rexton, N. B., sends a recitation, "Made in Canada," which is inserted with a few changes from the original. Children should be taught that "while Canada is for the Canadians," we should be on the best of terms with other countries, so far as trade and intercourse are concerned.

## Made in Canada.

What is the creed and the calling that we of the north upliold?
It is not the cry for power, it is not the greed of gold.
Let the east and south and west contend, like wolves for a maverick bone;
But Canada for the Canadians is the creed that we call our own.

Beef and bread and a blanket, a pipe. a mug, and a fire,
Are the things that we have in Canada; what more can a man desire?
What so good as our home-made cloth, and under the wide blue dome,
Will you tell me where you have fasted bread like the bread that is made at home?

And we are the young and the strong, and who so fit for the work as we?
Wihh our hands of steel and our iron heel, and our hearts like the oaken tree.
For we are the home-bred, home-fed men, the pride of ? princely land,
And the things that are made in Canada are the things :hat her sons demand.

So this is the creed and the calling that we of the north uphold;
It is never the cry for power, it is never the greed of gold.
Let the east and the south and west contend, like wolves for a maverick bone,
But Canada for the Canadians is the creed that we call our own.

## Games for Primary Grades.

There is no one thing in the primary grade that gives a better return than the playing of games. In no other way is the freedom of speech, the litt!e courtesies, and the spirit of unselfishness so easily taught.

## THE MULTIPICATION GANE

Is a favorite and is a friend to the teacher who wonders why children cannot learn tables more readily.

Have small cards, either written or printed, with a multiplication combination on each. Turn then, numbers downward, on a desk. A child runs up, takes a card, peeps at it, bolds it carefully that :1o other child can see it. For example, the card has on it $8 \times 6$.

The child says: "I am a child from the family of 6's, can you guess my name?"

He then calls on a pupil who says: "Are you 7 6's are 42?"
"No, James." (Calls on another).
"Are you 3 6's are 18?"
"No, Edith," and so on until the correct combination is called. Then he shows the card, and the one who guessed correctly chooses a card and continues in the same way.

If the pupil called on should make a mistake. for instance saying, " 76 's are 45 ," and the pupil with the card fails to say, "That is incorrect," he is obliged to forfeit his card to some child who noticed the mistake. The improvement in multiplication tables can be noticed in a few weeks after playing the game, for all the pupils are desirous of being called on to guess.

## SPINNING TIIE PL.NTTER.

This is another little device for the dreaded mu!tiplication table. Let each pupil have a card
with a mnltiplication combination on it. Have a granite pie-pan, or like contrivance, that can be placed on edge and sptu like a top. The game is started by a child who " spins the platter " and at the same time calls for a combination as " 6 9's." The pupil who has the card with the six nines upon it, runs to the platter, saying as he runs, " Six 9's are 54." If he gives the combination correctly and gets there before the platter has stopped spinning, he has the privilege of spinning the platter and calling for a combination. If he fails to give his combination correctly, or to be prompt in reaching the platter, he takes his seat and the first pupil has another turn. The delight the pupils take in having an opportunity to "spin the platter" makes them alert and prompt in answering, and in this way a fine review of tables is given without the pupils knowing that they have been working as well as playing.-Teachers Magazine.

## THE MISSING PUPIL.

The little diversion of the missing pupil is old, ant is variously modified. A small pupil (Anna), in the centre of a group or circle, is blindfolded, while her playmates march around and sing this stanza:

> Happy now together.
> All our classmates play,
> We are ne'er so merry
> When there's one away.
> But some one is missing-
> O, ans, it's true!
> Please will some one call her?
> Anna, dear, will you?

As they sing. onc of their number detaches herself from the others, and hides behind a tree or leehind the teacher. The child in the centre removes the bandage from her eyes, and guesses who is grone. If she guesses correctly, the child who is concealed is the next to take the place in the centre. -School Recrations and Amuscments. Americon Book Company.

Andrew I ang includes " month" in his list of 60 English words that have no rhyme. He apparently never has heard the olel verse of the mathematical student:

The Nth term and the $(N+1)$ th
Have troub'ed my mind for many a month.
-Neru York Tribune.
1 have been a subscriber to the Review for ninc gears, and every mmber received has been helpful to me in my work. Wishing you still greater success, I remain, yours truly, E. M. F.

## CURRENT EVENTS.

The ninth of November is King Edward's birthday, and one of the days on which the school flag should be flying.

The Emperor Menelik, who has no children, has named his nephew as heir to the throne of Abyssinia. The choice has the approval of Great Britain, France and Italy.

While the proposed tuminel to Prince Edward Island is not yet begun, a British Columbia board of trade is proposing a bridge to connect Vancouver Island with the mainland, at a cost of twenty million dollars.

The British squadron under command of Admiral Prince Louis, of Battenburg, after a long stay in Canada, has left for Annapolis, Md., where it will be received by a United States squadron under Admiral Evans. Leaving there on November 8th, the two fleets will be in New York harbor on the King's birthday. From the latter port, the British squadron will sail direct to Gibraltar at high speed, the cruise being part of the admiralty's plans for testing the new disposition of the Atlantic fleet and its availability in case of need.

The Prince and Princess of Wales have left Engiand on their visit to India, where great preparations have been made for their reception. The departure of Lord Curzon is postponed until after this visit.

In two and a half years' time, at a cost of fifty lives and much money, a British expedition has completed a survey of the boundary line on the Afghan and Persian fronticr. It was a work of immense difficulty and danger. Terrible winds were encountered, with intense heat and intense cold. To get the information needed for a military map of the region was, perhaps, the real reason for sending out the expedition.

The international waterways commission has sent gcological experts to report upon the receding of the Canadian side of Niagara Falls, where there is said to have been a recession of three hundred feet in the last eighty years.

The Hottentots in German Southwest Africa have again taken the offensive, and have captured an importarit German post. The Germans are falling back. The Basutos, in British territory, are said to be restless, their cnmity being directed towards the Boers rather than the British.

A Russian despatch says negotiations between Great Britain and Russia regarding Asiatic questions are proceeding favorably, and a complete understanding seems to have been reached. This means delinitation of the Russian and British spheres of influence in Asia, and will probably give Russia commercial access to the Persian Grilf.

The Quebec government is taking steps towards the settlement of the boundary line between the province and the narrow strip of Labrador territory controlled by the government of Newfoundland.

The rights of all foreign fishermen on the coast of Newfoundland were not finally determined when the French gave up their claims. United States fishermen have certain rights there, under the treaty of 1818. They may take fish in Newfoundland waters, and enter the bays and harbors for certain purposes; but these purposes do not include buying fish, or shipping crews of fishermen, both of which the Gloucester fishing vessels have been doing. The Newfoundland government has determined to put a stop to these practices, thus preventing the Gloucester fishers from sending Newfoundland fish into the United States markets duty free, as their own catch; and making it possible for Newfoundland fish merchants to get some share of the trade.

King Edward has opened a new thoroughfare in London, which has been six years in construction, and has cost thirty million dollars. It is threequarters of a mile in length, and to make way for it some of the worst slums of the city have been ranoved.

The Irish language is now taught in more than three thousand schools in Ireland.
The Norwegian Arctic exploring expedition, which has been working along the north coast of Canada, is reported to have made the northwest passage, and may be expected to make its way through Behring Strait next summer.

Norway is now an independent state, the bill repealing the union with Sweden having passed both the Swedish and the Norwegian parliament. Prince Charles, of Denmark, will probably be chosen ruler of Norway, with or without the title of King.
Hong Kong, hitherto spoken of as the third shipping port in the world in respect to the number of vessels entering, is now, according to official returns, the second; London being, of course, the first, and New York the third.

The coming winter promises to be the brightest ever experienced in the coal trade of Nova Scotia. Louisburg, the winter port of shipment for the Dominion Coal Co., will have the busiest season in its history. The time is not far distant, it is said, when Nova Scotia itself will utilize two million tons of coal per year.

The government of Venezuela, having successfuily defied the United States, and refused to set aside a decree of its own courts at the dictation of President Roosevelt. is now defying France. F. ance is sending war-ships to the West Indies. The cause of the trouble, in both cases, is the granting of concessions to foreign commercial companies, and the appeal of these companies to their home governments against the rulings of the Venezuelan courts.
"Laugh and grow fat " is the prescription that cannot well be taken serionsly; yet it is said that dyspepsia is now to be systematically treated by laughter, and that a Paris physician has established a sanitarium for that purpose.

During last year, 117,271 immigrants arrived at Canadian ports, and thousands more came from the United States.
An international congress in Belgium has approved the plan of placing polar exploration under international direction.

It has long been known to geographers that by an inland ronte from the southern extremity of the Caribbean Sea, running due south up the valley of the Atrato and down that of the San Juan, a small river emptying into the Pacific four degrees north of the equator, it would te possible to dig a canal at sea level from ocean to ocean. The great distance is the objection to this route, for a canal dur here would be not less than five hundred miles in length; but, as there are supposed to be no great engineering difficulties in the way. such a canal is now thought of as a possible rival of the Canama canal.

There is a native insurrection i:n liritish East Africa, and tribesmen are threatening the destruction of the Uganda railway.

More coal was exported from the Linited kingdom last year than in any previons year, the total reacling some:hing more than sixty-five million tons.

Great Britain and China have agreed on a conference for a new Tibetan treaty, (hina maintaining that the Tibetans themselves, as vassals of the Chinese Empire, have to treaty making powers. It is learned that the Dalai Lama, who fled from Tibet at the approach of the liritish forces, is returning.

Work wilf begin at once on a railway from Peshawar to the Afghan frontier on the Russian side. When this is completed, Russia and Great Britain will be practically in touch in Central Asia.

The new Anglo-Japnese tteaty marks a $1{ }^{\prime \prime}$. er in the history of Eastern Asia. English iteas of justice and integrity, as exemplified in the government of India, are to rule in the Far East : Japm is recognized as a power of the first rank, and the !eader of the Oriental races: (China is to develop) in its own way, and be henceforth treated as an çpal by the other nations of the world.

A timber famine is threatened in the United States, and it is becoming more than ceer el ar that Canada is the future source of supply for forest products in North America. A great Cantalian forestry convention will be he!d in Ottawa in Jannary, at the call of Sir Wilfrid Laurier, to d'scuss anong other matters, the increased danger to our forests which the opening up of new railway lines will bring.

The present population of Asia, including the East Indies, is estimated at mine hunded millions: that of Europe at four humetred millions: that of North and South America, with the West Indies inchoded, at about one hundred and fifty millions: and that of Africa, Anstralia and the Pacific Islands at one hundred and fifty millions.

The German government has decided to equip all lightships along the Baltic and North Sea coasts with a special signalling apparatus, consisting of a submerged bell rung by steam power. By vessels properly equipped with receivers, the sound of the bell can be heard under water for a distance of eight miles or more. There have been more wrecks on the Baltic coast in proportion to the trade than on any other coast in the world, the average being one wreck a day the year round.

Timbuctoo is now considered within the reach of tourists. Eight days by steamer from France will take the traveller to Dakar, on the coast of Africa. One day thence by train to St. Lonis, three days by water to Kayes, two to Kilikoro by train, ant four days thence to Timbuctoo, by the new steamboat service established this year, will complete the journey.

There is a general opinion that the climate is nodergoing a gradual change, in consequence of the irrigation works recently established, and the broader area of cultivated land and greater amount of water evaporation that must follow. It has even been said that the Sphinx and other monnments that have withstond the former climate are crumbling because of the greater moisture. But official reports show that the rumors are untrue. None of the observations indicate any change of climate.

Thousands of settlers who have taken up government lands in Southern California will be driven from their lomes as a result of bad enginecring in diverting the course of the Coloralo river for irrigation purposes. This is the statement of a member of the international waterways commiss:on, who predicts that within twenty years a million arres of the valley will be covered by a new inland sea.

The approach of a presidential election in Cuba is viewed with some degree of alarm by the Unitad States authorities. as serions disturbances are threatencel. One of the Cul) party leaders is now in the Cnited States seeking for intervention by l'resident Roosevelt, and an armed uprising to hring ahout that intervention is among the possibilities.

The wireless telegraph station on Sable Island is a marked slecess. The Minister of Marine speales of it as the most important telegraphic station in the world. Firom eighty to one hundred messages at day are received.

1 lamp which gives meither light nor heat is a new German invention. It is designed to give ont the invisible rays of the spectrum. know as the ultra-violed rays. These rass have a powerful chemical effect, and are very destructive to bacter:9.

Believing ornamental wardening to be a suitabie "cenpation for woman. Miss Krupp danglter of the celchrated gumaker, has started a sehool in Ciermany where girls are 1 ratined for that pursuit.

The pepulation of kinsia is increasine more rapielly than that of any other commtry in Eurone, with thr exeeption, perhaps, of Denmark, Swelen and Norway.

The 15th of November is the date fixed for the garrison at Halifax to pass into Canadian hands.

Nearly forty different languages are now spoken in Canada, including those of the various Indian tribes.

Disbanded Russian officer and soldiers of the late war are to be offered free lands for settlement in Siberia, a plan which was adopted in the early settlement of our own country, and which has the double advantage of bringing new lands under cultivation and giving employment to the disbanded men.

Nearly every man in China can read, but very few of the women are educated.

Among new building materials now coming into use are bricks made of clean sand and ground quicklime which are said to be as substantial as granite; and a new material called wood-stone, which is made of sawdust and calcined magnesia, and is sairl to be water-proof, incombustible, and capable of taking a high polish. Glass bricks have been known for some years, and are used for walls that need to be at once fire-proof and translucent. In some parts of France thcy are used for street pavement.

Russia is practically cut off from the rest of Europe by a general strike of railway employees. The want of food will soon be felt in the cities, if the sifiuation remains long unchanged In the meantime, there is comparatively little disorder and the government is doing cverything possible to keep food supplies moving by military operation of some of the railways.

Count Witte, the successful peace ncgotiator, has been called upon by the Czar to form a cabinet which may meet the new national assembly when it convenes, and form the first responsible ministry of the empire. If the present industrial disturbances, do not lead to anarchy, next year will probably see Russia, governed by a limited monarchy much like our own.

The partition of Bengal for administrative purposes has given much dissatisfaction to the natives. as it is known to be a measure adopted by Lord Curzon, the retiring viceroy, as a means of lesseninthe influence of that state in the affairs of the Indian Empire.

Trafalgar Day, the hundredth anniversary of Nelson's victory and death, seems to have been cslebrated in a cuiet and dignified way throughout the Empirc. In Halifax, Prince Louis's flagship, the "Drake." hoisted Lord Nelson's flag, and the old signal for close action. and the other slips of the fleet were dressed with flags. At ha'f-past four, the hour of the death, Nelson's flar and the ensign were lowered to half-mast and minute guns fired. Similar honors were paid to the memory of the hero on all the ships of the navy in Englishi waters, and there were commemorative ceremonics and adtdresses on land, as well as at cea.

## Teachers' Conventions.

## Teachers' Normal Institute.

The Teachers' Institute for the six eastern counties of Nova Scotia, held at North Sydney from the 25 th to 30 th September, was somewhat unique in character. Instead of the usual formal papers, often of little benefit to young teachers, there were in the forenoons of four consecutive days fortyeight model lessons on the subjects most important to the ordinary country school-reading by Miss Dillon, of Guysboro, and Miss Patterson, of Glace Bay; arithmetic by Prof. Comnolly, of the normal school, and Miss Edgecombe, of Sydney; language by Miss McKenzie, of Sydney Mines; geography by Miss Macneil, of Sydney ; grammar by Principal McLeod, of 'Whitney Pier; drawing by Principal Smith, of Port Hood; nature by Miss Kelly, of Glace Bay, and Principal McInnis, of Reserve Mines, supplemented by Principals Armstrong and Matheson; and botany by Miss McLeod, of Bridgeport.

The choice of topics showed that somebody understood exactly what the eastern schools most needed, and the selection of instructors could not have been excelled in any part of Nova Scotia. It might have been thought difficult to give a model lesson to children with whom the instructors were not acquainted, yet it did not seem to be. For the North Sydney children behaved admirably, not only in the classrooms, but also in the hallways and in the streets. The instructors, by their skilful presentation of knowledge just suited to the various stages of child development, and by their charming manner, not only held the attention of the children perfectly, but they also enlightened and inspired the on-looking teachers.

In primary reading the phonic method was used to give the pupils a mastery of all regular words and to train them in distinct articulation and nice discermment of sounds. To facilitate their progress anomalous words were disposed of by the "look and say " method-these methods being always held subordinate to interest in the content. . Interest was aroused and augmented by preliminary talks carefully propared and epitomized on the blackboard in such a way as to introduce the more difficult words of the lesson in advance.

In arithmetic the exercises were founded on the transactions of everyday life. The several steps of the unitary method were made very plain in problems of gradually increasing difficulty by which the pupils were trained to analyze and reason systematically.

Principal Smith. of Port Hood, in one lesson taught a class of thirtecn-year-old pupils to construct, with a clear understanding of the principles involved, a diagonal scale, and to use it readily in the measurement of lines. What would not a week or a month of such teaching accomplish?

The nature lessons consisted of a study of speci-
mens in the hands of each pupil-no text-books being used. No mcre memorizing of information reccived from other people's observation will hereafter satisfy those teachers who noted the interest with which the pupils were led to make all the discoveries for themselves-the instructor merely supp!ying. when necessary, the new technical terms.

After each lesson an opportunity was given for questions and discussions. which for the most part consisted in expressions of appreciation: for adverse criticism was scarcely possible. The Superintendent of Education contributed very much to the interest of this part of the programme. After each lesson, to which he listencd, he pointed ont the fundamental principles upon which success in the teaching of that subject depended, and how it was that the instructor, amisl so many distractions, was able to make such a deep impression upon the pupils. He dealt very fully upon the value. methods and possibilities in mature study. and upon the suitability of practical studies for the best kind of mental discipline.

In the schools of North Sydncy and Sydney Mines music receives adequate attention under the direction of Professor C. L. Chisholm. These are the only places in Nova Sentia where a special supervisor of music is employed. The results more than justify the time and expense. Fess than threc half-hours a week enables the purpils to sing correctly and readily any ordinary music at sight from the staff notation. The absolute accuracy with which the pupils could instantly strike ans inote in any key, and the firmness with which they held their parts in two, three, or four part harmoniv was fittle short of marvellons. None of those who were present on Thursday afternonn at the demonstration given ly Professor Chisho1m, of his splendid system of teaching music, nor of those who hear.l Dr. MacKay's clear expositions and entlusiastic defense of nature studies will ever hereafter se disposed to place these subjects among the "farls and frills" of education, unless indeed it slonulal be found that, after all, the so-called "farls and frills" are the essentials, while the three r's are the instruments, to be learned incilentally, vet not less thoroughly. on that account, than heretofore.

On Tuesday afternono the teachers had a delightful sail on the harbour as the guests of the town r.f North Sydney. In addition to the enjoyment of social pleasures, the teachers gained an appreciable amount of gengraphical knowledge in a manner which may suggest more rational tuethons of communicating such information to their pupils. ()n Wednestay afternonn they risited the Domininat Iron and Steel Company"s works at Sedney, and wondered at the enomplicated machinery, which almost seemed to be prossessed of intelligence of its own. as it moyed about. huge masses of incandescent iron placing them licere or there, of turning them over as required, sending them at length of © cars as completed rails, or coiling them up is completed wire. The teachers will relurn to their
schoolrooms with an increased respect for science and for the resources of our country, with enlarged views and a broader ontlook.

For all these privileges the teachers are indebted to the Edncation Department, for recognizing in a practical way the value of this short normal course, to those who clid not have the advantages of traiaing at the normal school. They are equally indebted to the executive committce, consisting of Inspectors Macdonald. McKinnon. Macneil and Phelan, assisted by Principals McKenzie, Matheson, Macdonald and Smith, and Mr. Stewart, for the excellent programme so perfectly carried out. Inspector Macdonald as chairman, showed great exccutive ability. For many years he has rendered such great services to the cause of education that the opinion was frecly expressed, that the list of those honored by St. Francis Xavicr College at its recent brilliant jubilee, was incomplete without one name more-that of Professor A. G. Macdonald.

## P. E. Islind Assochation.

The Prince Edward Island Tcachers' Association met at Charlottetown, September 27. 28, 29. There were nearly 200 teachers in attendance. Vicepresident J. E. Gillis gave an excellent opening adkress, after which Mr. H. B. MlcLean, of the Nacdomakl consoliclated schonl, Fillsboro, read a practical paper on mannal training. One session was occupied in visiting the consolidated sclool at Hillsborn, where an inspection was made of the classes at work. Following this a model lesson was given to a class of grade six pupils in the assembly hall of the school by Dr. Brittain, of Fredericton. The subject was butis and leaves, and it was made an excellent example of a mature-sturly lesson. A paper oin the Teaching Process was reat by J. A. Ncllhee, B. A. of Souris, and Dr. Brittain gave an address on mature-study, illustrating the best methods of teaching it.

At Friday's session the school book fucstion was dischssed and a number of changes suggested. Amone them the substitntion of a book on Canarlian history. to take the place of Clement's text, and new textson botany and ayriculture were recommended. An interesting paper on Defects in the Curriculum was reall by Mliss A. S. Clarke, in which she advocated more nature-study: bingraphy and literature $i_{11}$ the schools. The papers and addresses were discussed by the members of the convention in an excellent spirit. The convention. Dy resolution. asked the grovermment to apponint a commission to deal with the whole educational guestion of the lsland. and asked that teachers be represented on the a mmission. A resolution was adopted placing on record the appreciation of the combention for the services of the late Inspector W. D. MeIntyre. The following officets were elected for the ensuing year: President. J. E. (iillis. (Marlotetown; vice-presi. rents, I. W. Jones. Ifillsherough. (2. C.;Tuspector Natthews, Alberton. 1'. C.: J. A. Mcl loce, Somis.
K. C. ; secretary-treasurer, James Landrigan, Charlottetown; recording secretary, H. B. McLean, Hillsboro; additional members of executive, Miss S. A. Clarke, Chas. McDuff, Vernon Coffin, P. F. Hughes, J. W. McDonald.

## Victoria County, N. B., Institute.

The Victoria County teacliers, to the number of twenty-five, met at Grand Falls, September 28th and 29th, Inspector Meagher presiding. He gave a very suggestive address, with examples, on the first steps in teaching arithmetic. Papers were read by Principal J. C. Carruthers, of the Grand Falls school, on the Development of the Imagination; a paper on Empire Day from Miss Bessie M. Fraser, now of Chatham, N. B., was read by Miss Curry. Dr. Inch, chief superintendent of cducation, and Dr. Hay, of the Educational Review, attended, took part in the proceedings and addressed the evening meeting; presided over by Inspector Meagher. This was very largely attended and much interest was shown by the people.

Touching reference was made during the proceeding of the institute by members and by Dr. Inch to the death of Thos. Rogers, of Carlingford, a faithful teacher and an active member of the institute. This expression of feeling was conveyed to the family of the deceased in a touching resolution framed by Principal Carruthers and Miss Goodinc.

## Nortilumberland County Institute.

The twenty-ninth annual meeting of the Northumberland County teachers, of whom about cighty were present, was held in the Harkins' Academy, Newcastle, N. B., October 5 th and 6th, with President Jas. McIntosh in the chair. Addresses were given at the opening session by Inspector Mersereail and by Dr. Cox. The former stated that pupils in the advanced grades of our schools were unable to attack problems independently. The cause was to be found in the many time-killing devices in the lower grades to make the lessons entertaining and the work easy. Two well taught lessons were given to classes, -one on reading in grade I by Miss Sarah Hogan, and the other on the Personal Pronoun to a more advanced grade by Miss K. L. 'Troy. These lessons were discussed at length by members of the institute. Mr. T. B. Kidner, director of manual training. gave two addresses on this subject. one before the institute and the other at the public evening meeting. going very fully into methods and the benefits to he derived from its introduction into the schools.

At the sccond day's sessims papers were read as follows: On Canadian 1 istory: Br Miss M. I. Dunnet, How to Deal with the Dull Pupil, by Miss Bessic M. Fraser, ancla faper om Number bi hiss Jemmic S. Crammonsl. The papers brought out fruitful discussions, in which many members of the institute took part. The next meeting will be held at Chatham. The following officers were clected
for the ensuing year: B. P. Steeves, B. A., president; Miss Carroll, vice-president; O. N. Brown, secretary-treasurer; Miss B. M. Fraser and Miss Dunnet, additional members of the executive.

## Westamorland County Institute.

The twenty-eighth annual meeting of the Westmorland County teachers took place at Dorchester on Thursday and Friday, October 5th and 6th, the president W. A. Cowperthwaite, A. B., in the chair. About nincty teachers were present. In his opening address, the president stated that the programme had been framed with the object of making the meeting useful and suggestive by having as many lessons as possible taught before the assembled teachers. Miss Doyle, of Port Elgin, taught a lesson in reading to a class of grade II pupils, and Mr. R. B. Masterton, B. A., followed with one on grammar, both of which were commended in the discussion which followed. The public meeting on Thursday cvening was very largely attended. Judge Landry presided and made an excellent address, followed by Principal Oulton, Inspector O'Blenes and others.

At Friday's meeting a lesson on the map of Quebec province was given to a grade VI class by Miss Nicolson, of Moncton, followed by an illustration of methods in arithmetic by Inspector O'Blenes. At the afternoon session the institute was divided into a primary and an advanced section. In the latter the question was discussed of a larger allowance of time for the closing examinations for matriculation and for entrance into the high school. A committee consisting of W. A. Cowperthwaite, chairman, 'T. T. Goodwin and A. D. Jonah were appointed to confer with representatives of other commties in regard to this matter, and then, if the rest approve the idea, to memorialize the government.

The following were elected officers for the next year: A. D. Jonah, president; Miss Lea, vice-president ; S. W. Irons, secretary and treasurer; H. B. Stecves, II. Burns, executive.

The institute will meet next year at Shediac.

## Albert County Institute.

The twenty-eighth annual meeting of the Albert County teachers was held in the new consolidated school at Riverside, N. B., on the 5th and 6th Octóber, the president, Thos. E. Colpitts, A. B., in the chair. The teachers were much interested in visiting the different rooms of the new school building, which occupies a fine position nearly midway between the villages of Albert and Riverside, with plenty of space for playgrounds. school gardens and an aboretum. The mannal training. domestic science and science departments liave not yet been fitted up. In a short time these will be in rumning orler, and will meet the conditions required by the gift of $\$ 5.000$ promised by Ex-Governor McClelan. The school has admirable facilities for work, and
promises, under the principalship of Mr. G. J. Trueman and his excellent staff, to be one of the best equipped educational institutions in these provinces.
The first paper after the opening addresses was read by Miss Glendine Brewster on Talking-Is it a Crime? The opinion of the reader of the paper and those who followed in the discussion was that if the work of the school is carried actively and interestingly along there would be little disposition for trifling. The paper was followed by an interesting summary of educational conditions in the country schools of the Northwest by Miss M. E. Bray; a paper by Rev. A. W. Smithers on Some Psychological Aspects of Teaching, and a naturelesson conducted by Dr. G. U. Hay, after which the institute adjourned for a field excursion under his direction.
Hon. A. R. MeClelan was chairman of the public meeting in the evening, helel in the assembly hall of the school, and gave an excellent practical address on the requirements of modern education. He was followed by Dr. Hay, I'rincipal Trueman and others.

During the second day's sessions Mr. Gco. H. Adair, of Hopewell Hill, read a paper on Rural School Districts, showing some of their advantages; Mr. M. R. Tuttle, of Elgin, gave a helpful paper on Teaching English; F. K. Branscombe, of Hopewell Cape, gave an illustrated lesson to a class of little boys on Eclipses of the Sun and Moon.

Elgin was chosen as the next place of meeting. The institute elected officers for the ensuing year as follows: Geo. J. Trueman, president; Miss Winmifred V. Smith, vice-president; Percy . . Fitzpatrick, secretary-treasurer. Additional members of exceutive, Miss Edna M. Floyd, Miss Jennie Smith, Miss Marion Atkinson. The retiring president, T. E. Colpitts, was tendered a unamimous vote of thanks for his earnest efforts in behalf of tha. institute for the several years he has filled that office.

## United Institute of St. John and Charlotte Courities.

Nearly three hundred teachers attended the united institute of St. John and Charlotte Counties in the assembly hall of the high school in the City of St. John, October 12th and 13 th, !rincipal I. S. Lord of Fairville, in the chair. Mr. Lord's decision and energetic ruling, and the admirable and varicel programme carried ont, made the institute one of the best ever held in this section of the province. The united executive committee who hat charge of the arrangements well deserved the thanks of the assembied teachers. After the president's opening address, Miss Etta Rarlow gave a comprehensive paper on colour, illustrated bo an admirable scrics of charts. A "Song and Drill" by a class of gitls trained by Miss A. M. Hea was very gracefully and effectively given. Reading lessuis to a primary class by liss Lily A. Belyea and :o
an advanced class by Miss Ella McAlary gave an opportunity to observe good methods in teaching.

At the evening meeting, presided over by Inspector Carter, addresses were given by Mayor W. W: White and Supt. W. W. Stetson, of Maine.

A trio of papers on nature-study, by Mr. $\int$ Vroom, Miss H. L. Edgecombe and Mrs. J. M Lawrence, written in beautiful language, breathed a refreshing out-of-door spirit. Two papers on the School from the Standpoint of the Parent, by Mrs. Wm. Kerr and Mr. S. D. Scott, editor of the Sun, were outspoken in grenerons appreciation of the services of teachers. Miss Eleanor Robinson gave a lesson on Shakespeare's Hamlet, taking the members of the institute as a class. The lesson was a fine example of a keen critical analysis of this great play.

The following is a list of officers for the ensuing year: St. John Comnty-A. L. Dykeman, president; A. E. G. Mchenzie, vice-presilent; Miss A. M. Hea, secretary-treasurer; W. L. McDiarmid, Miss Etta Barlow, exccutive.
Charlotte County-Mrs. MeGiblon, St. Stephen. president; C. A. Richardson, St. Andrews, vicepresident: J. Yroon, St. Stephen, secretary; Mrs. Giraham, Milltown, Miss Olivia Maxwell and F. O. Sullivan, executive.
[Further reports of institutes will appear in the Decenter mumber.]

Teaching how to stuly is of infinitely greater importance than hearing recitations. If a child can study he will learn without further aid. Cood luck may help bim out in recitations, even though he knows precious little about studying. A recitation should always le conducted primarily to discover how the child has studied rather than what he knows. The tonchstone for good teaching is ability to teach a class how to study, not simply this lesson, but any lesson, not simply one subject, but :uny subject. The art of studying is the thighest art attained in school. - American Primary Teacher.

## To Interest the Parents.

Write on the hoard an invitation to the parents to visit four school at some particular time. Have cach pupil copy it, and then sign your name to it and have it taken home. See that everything about the invitation is correct, as it is also a language lessom. As a somvenir of the oceasion, have eacth pupil prepare a set of papers showing his work. The cover may exhil,it his skill in drawing designa. Let all be arranged with cate and taste.

Kesult: (ireater interest in work om the part of the pupits; better work dine: the parents interested


## Keeping the Children in School.

There are ways of getting hold of the larger boys and girls and inspiring them with enthusiasm for school, if not for knowledge. No one who has seen the persistency with which many grown men frequent the evening schools can doubt this. The chief trouble is that, at the age when children, particularly boys, begin to take an active interest in life outside the school-room, the school fails to respond by pressing these outside interests into service and relating the school-work to the daily lives of the children.

The work in arithmetic at this period should be very practical and appeal to the boy's self-interest by its obvious relations to business needs. The geography should be enlivened by books of travel, the history by historical novels. The school should have either a library of the right kind of books and magazines or the teacher should press the public library into her use. Gardening and agriculture should be presented in a practical way. The teacher should find ont the things that most interest big boys ontside of school, and if these are worthy interests, encourage them, and appeal to the boy as an authority on that subject in a way that will arouse his pride.

If possible, gct up a school excursion now and then to some place of intercst. Give the boys some part either in arranging work, caring for the building, keeping order, or helping others, that will make them feel that the success of the school rests in some real and definite way with them.

As regards arousing the right spirit in the community, the problem is more difficult, because the teacher has so little time to give to this side of the matter. Still, if the teacher makes a beginning the parents will usually meet her half way. Parents' clubs and parents' days will generally do much, but, if possible, the teacher should try to know the fathers and mothers personally and make them her friends. If it can be done in no other way, invite them into the school frequently and have some little entertainment planned for them. And have some of these entertainments at hours when the fathers can attend as well as the mothers.

Public sentiment is about the most powerful aid a teacher can have in keeping the children in school. Do not be merely a school teacher, then, but take some active part in the life of the community. If some rich and public spirited mencould be induced to endow the public schools, as well as colleges and
private institutions, with books and laboratories and apparatus, and, perhaps, some form of scholarships, it would be a vastly easier matter to keep the children in school and longer out of the shop and fac-tories.-Adapted from Popular Educator.

After several years' experience in teaching fractions, I have adopted a rule given by the instructor of mathematics in a large normal school. Never explain to beginners why you invert the divisor. I am a firm believer in explanation, but I think there are a few cases where a short rule, unexplained, will produce better results than a long discourse explaining the different steps. Children's brains are easily tired, and there is enough in arithmetic that must be explained, without compelling them to fix their attention on ideas which their undeveloped minds grasp with difficulty. The time given to teaching fourth-grade pupils why the divisor is inverted, may be more profitably spent in other ways. -Sclected.

Many interesting experiments can be made with soap bubbles blown from a mixture of warm water, castile soap and glue. It is not generally known, however, that bubbles can be frozen, though this is very easily done. Blow a bubble of moderate size, and carry it to the door, or put it out of ant open window on a winter day. The bubble will freeze instantly, retaining its shape, but forming most beatitiful crystals. If you try this little experiment on a clear day when there is little win: 1 , you will be delighted with the result.-Primiry Education.

Devices to teach reading to first year pupils are "cleaning house," and " picking apples." Sketch a house on the board and fill with words which they have studied. Then as they name the words these are crased until the house is clean. When they "pick apples" they must get to the full limit of the tree by means of a ladder, cach step of which is a word. When they can climb the ladder they may pick the apples (words).-Sclected.

A little seven-year-old, white wrestling with the intricacies of the English grammar, was asked by his teacher: "Hawley, can you give the principal parts of the verb ' to die?'" ". Oh, yes," said Hawley, his face lighting with sober intelligence: " present, die; past, dead; perfect participle, buried!"

## A Feeding Place for Birds.

A friend who had no tree in the yard to accommodate bird food had a stout pole about the size and height of a clothes pole erccted near a window, where she could watch it. On top of the pole was nailed a square board. This shelf was kept supplied all winter with scraps of meat, suet, bread crumbs, corn and oats.

There never was a day when this table was not well patronized by several different kinds of birds. The chickadees, woodpeckers and blue jays were daily visitors, and in extremely cold weather, especially after a severe snowstorm, snow-buntings and grosbeaks were seen feeding there.

The birds came singly at first, but it soon got noised about in Birdland where food could be obtained in great variety, and then they came in flocks so large that the shelf would not accommotate them all, and some would have to wait on the ground, very impatiently, for their turn at the feast.

One day a flock of hungry juncoes came just as the table had been replenished. All could not dine at once, however; but as if by mutual understanding, as many alighted on the shelf as conld conveniently feed together, and began a systematic scratching which quickly scattered a portion of the food upon the ground bencath, where the rest of the birds found enough and to spare.

One such feeling place in every yard would be the means of saving hundreds of birds that anmually perish during the cold winter montls.

If one is fortumate enough to have a tree in the yard, several suct bones dangling from the limbs would soon entice the little wanderers, who are always on the lookout for some such sign. A suet bone is as suggestive to the feathered tribe as was ever a swinging sign over a tavern door to weary wayfarers in "yc olden tinue."

The birds will not forget your kindness, be assured; and your yard will be the auditorium for many open-air concerts when the trees don their spring attire and Mother Nature opens her storehouse for our little feathered friends.-Selected.
" I seek no thoms," said Goethe's wise mother to a sentimental maiden, "and I catch the small jors. If the door is low, I stoop down. If I can remove the stone out of my way, I do so. If it is ton heavy, I go around it. And thus every day I find something which gladdens me."

## Treasures of a Country School.

When I began school last September there was not a picture on the walls of my school-room. The room had been newly boarded on the inside, and a few pictures which my predecessor had left were destroyed during the summer. I wanted to make my school-room look as nice as possible, and though I had plenty of pictures, I did not feel able to afford mounting board for so many, so I looked around for a substitute. I found that twelve-inch sheets of bristol-board were just what I wanted, beisg inexpensive and adapted to $m y$ needs. On these I pasted my pictures, from one to eight on each sheet. according to the size of the pictures, and as nearly related to the same subject as possible.

The pictures had been gathered from many sources, from old magazines, railroad folders, advertisements, etc. liesides these I hail some Perry fictures and some large colored pictures cut from old inagazines bought at half price. I used forty of the bristol-board sheets, on which I pasted some lundred and twenty pictures, and although it was no small undertaking to cut out and monnt all those pictures, the result fully repaid me. I have one sut of shects devoted to anthors, one to historical pictures, one to views of fine scenery, another to children's pictures, etc.-A Teacher-Selected.

In teaching literature, usually there is too much analyzing and diagramming; too much talk about literature, and too little of the thing itself. Many can talk glibly of books, their titles and authors, but know nothing of the life-giving thoughts on the pages. Outlines, classifications and " characterizations " are necessary, but it should be remembered that they are the mechanical and subordinate parts of the work. If at the close of a course, literature has not become bone of one's bone and tlesh of one's tlesh, the teaching has been profitless, and the sturlent has toiled in vain.- Eirchange.

What we need in life is some one to make us to t?: best we can.

There is always a best way of doing everything. if it be but to boil an egg.
livery day is a fresh begiming, Every morn is the world made new.
()nly the new days are our own,

To-day is onrs, and to-day abone.
-Susan Coolidere.

## N. B. Teachers' Association.

The executive of the N. B. T. A. desire to call the attention of teachers to the following resolution passed at the annual convention in Fredericton, April 24th last:
"All mombers of this Association changing schools shall notify the secretaries of their subordinate associations; they shall report when they have secured schools; and county secretaries shall make lists of all unfiled schools and furnish information, when possible, to members of Association. No information concerning vacancies shall be given to those not members of the Association."

When the address of County Secretary is not known, the report should be sent to H. H. Stuart, Secretary-treasurer N. B. T. A., Harcourt, N. B. This resolution is being very successfully carried out in Northumberland County, and to a less extent elsewhere.
The Teachers' Association of France, numbering II 5,000 members, voted very recently, to adopt the position of a trade union in its activity, and to affiliate with the unions in other trades employed by the govermment.
The Teachers' Association of Great Britain is also a powerful union, and since organizing on a union basis, has secured great reform in text-books, in school facilities and increased salaries. N. B. teachers may do the same.

A strong subordinate association was organized October 20th, ult., at Restigouche institute, with L. D. Jones, Dalhousic, president; Niss Eliza Richards, Campbellton, secretary-treasturer; Principal Lewis and others on executive. Restigouche County has hitherto been unorganized. The Northern teachers are becoming fully awake to the benefits of the association.
H. H. S.

An ill-natured teacher who was in a perftunctory way conducting a development lesson was seeking to lead the class up to the word "breathing." "What did I do the moment I came into the world?" she asked. "What have I kept doing ever since? What can 1 not stop doing without ceasing to be mysclf?"

The class was listless and nobody tried to answer for a while. Finally one surly-looking boy raised his hand.
"What is it?" asked the teacher.
"Finding fanlt," was the reply, and all the class showed signs of animation.-School Bulletin.

Short lessons on common words and much repetition for poor spellers is the only remedy for bad spelling.

And there are many kinds of love, as many kinds of light,
And every kind of love makes a glory in the night, There is love that stirs the heart, and love that gives it rest,
But the love that leads life upward is the noblest and the best. -Henry van Dyke.

The day it breaks, though it never falls-
The reason I'm sure I can't see;
The night it falls, but it does not break-
It's very perplexing to me!
-Charlotte Sedgzeick, in St. Nicholas.
We are waking up to the fact that there must be better pay for the average man or woman engaged in the work of education.-Theodore Roosevelt.
" I could almost dislike the man who refuses to plant wainut trees because they do not bear fruit until the second generation."-Sir Walter Scott.

## SCHOOL AND COLLEGE.

The Charlottetown school board has asked the city council to make an increase in the salary of teachers, not to exceed fifteen per cent of the present rate.
The school trustees of Bathurst village have increased Principal Girdwood's salary by $\$ 50$, and that of his associate teacher, Miss Agnes Nicol, by \$25: and "they deserve it," says our correspondent, who knows. Principal R. D. Hanson, B. A., and the teachers of the town of Bathurst have also had a substantial increase in their salaries. We hope other boands of trustees will hasten thus to acknowledge the services of deserving teachers. Our correspondent says: "The convent departments of Bathurst village are being refurnished witi Rhodes, Curry \& Co.'s latest desk-double, with individual seats. The sisters deserve the best equipment to be had; they are doing excellent work."
John W. Crowell. of Malden, Mass., has been appointed professor of civil engineering in the McClelan School of Applied Science, Mt. Allison.

Mt. Allison University opened the first week in October with fifty new students in attendance. The prospects for a successful year are very encouraging.

The University of New Brunswick resumed its work October 2nd with twenty-seven pupils in the Freshman class and over twelve senior matriculants, and with indications for a prosperous year. Professor Perrott, in civil engineering, and Professor Geoghegan, in English literature, are the only changes in the faculty.

The Yarmonth, N. S., academy graduation exercises took place on the 29th September and it was an occasion of great interest to the citizens of that town. The thirteen members who formed the "B" class, had all been successful in passing the government examination in July. A generous allotment of prizes was awarded successful competitors in the various branches of school work, and the
large audience showed their appreciation of the efforts of Principal Kempton and his associate teachers.

The Review extends its congratulations to Miss M. Miriam Kyle, recently a successful teacher in Vancouver, B. C., and formerly in Fredericton, Bathurst and Harcourt, on her marriage to Mr. Alex. J. Kent, a member of the mercantile firm of Kent, Brown \& Company, Moosejaw, Alberta.

The institutions of Acadia University this year have opened with large numbers of students and with brighter prospects of success than any preceding year. The staff of Acadia Seminary now numbers eighteen teachers, and the lady principal, Miss Carrie E. Small, M. A., is every day demonstrating her special fitness for the position to which she was recently appointed. The large and capable staffs of the Seminary and Academy give Principals DeWo:fe and Sawyer the opportunity to teach in the college, the former taking logic and the latter the junior classics an excellent arrangement, which serves to bind more closely the work of the three institutions.
The Misses Bessie and Clara Bridges, who obsained in April last a nine months' leave of absence from their educational duties in South Africa, have returned by way of Boston, New York and Philadelphia, after spending several months inspecting educational methods in England and on the continent, and in visiting friends in New Brunswick.
The friends of Miss Susan E. Cameron, M. A., will be p'eased to learn of her appointment to the principalship of the Royal Victoria College, in affiliation with MeGill University, Montreal. Miss Cameron's briltiant course at the St. John high school and later at McGill University, her excellent work in English literature, her enthusiasm and aptitude for teaching, have won for her deserved promotion.

## RECENT BOOKS.

Nova Scotia Readers. Books I-III. G. N. Morang \& Company (Limited), Toronto; Books IV-VI, Thomes Nelson \& Sons, Edinhurg.
The Review has received through the courtesy of Messrs. A. \& W. Nackinlay, of Halifax, copies of the above named books, which are to replace the Royal readers which have for so many years been in use in Nova Scotia.. It would be diffeult to conceive a more attractive series of readers than the first three in consents, illustrations and hinding. The pieture of the maple leaf on the cowers is suggestive of the material inside, which is made up largely of nature subjects, such as are supposed to be lamiliar to the chilt in his surroundings. Colored illustrations and full paige pictures from the best artists adorn the pages, which will be a veritable delight to the yomuger generation of Nowa Scotians. The selections have been made with the greatest care and judgment, and the result must be a delight indeed to children, and to those who wou'd make them hapiy.

The advanced readers, books 4, 5, and 6, are perhans less attractive in illustrations, type and paper, but the literary contents are all that could be desired. Selections have been made from over sixty of the best known authors in the English-speaking world, and in addition tincte are nearly a dozen who are distinctively Canadian, such as Howe, IIaliburton, DeMite, Lampman, Roberts, McLerd and others. They serve admirably to introduce to schons
children the writings of those authors who are attractive to the young.
A Midde Englisil Reader. By Oliver Farrar Emerson, A. M., Ph. D. Cloth. Pages 475. New York: The Macmillan Company. Toronto: G. N. Morang \& Company.
This reader serves as an introduction to the language and literature of the middle English period, between iroo and 1500, A. D. It is provided with an ample grammatical introduction, based on the needs of students taking up this period; selections with explanatory notes on the great dialectal divisions of the period; and a glossary which, in addition to the meanings of words used in the text, accounts for their urigin and forms.
Fifty English Classics Briefly Outlined. By Melvin Hix. Cloth. Pages 288. Price \$1.25. Hinds, Noble and Eldredge, New York.
This book contains a simple logical analysis of fifty masterpieces of English literature, including the best of the dramas, fiction, narrative and lyric poems, as well as essays and addresses. It is invaluable to those who would study a good piece of literature systematically,- to the teacher who has overerowded elasses and little time for preparation; to the student who has to depend on his own resources and is remote from libraries; to all who would do literary work on a systematic plan. The great merit of the book is its usefulness.

In Macmillan's Pieture Arithmetic (Book III), price 3d, teachers will find not only profitable material for number lesions, but subjects for language, history and geography $i_{11}$ the suggestive pietures that embellish the text.
Der Arme Sptelmann. A story by Franz Grillparzer Fsliter with notes and vocabulary by William Guild Howard. Harvarl University. Cloth. Pages 14.3. D. C. Heath \& Co., Boston.

This simple story of a poor minstrel has three aims.to interest the reader ly introdueing him to one of the most famous short stories of German literature, to teach hiu something about the German language, and to give him practice in the nee of common words and phrases.
The lhary of Sambel. Pepys. With an introduction athel motes by G. Gregory Smith. Cloth. Pages 8oo. Price as. Gd. Maemillan \& Company, London.
The Diary of Samuel Pepys (a note to this volume says the favoured pronunciation is peeps rather than peps, or pep-is, or papes, or pips), "is incomparable for its revel of small talk, for its intimacy, its confessions, its amusing impenitence." Nor is it less in favour because it is full of charming details of the customs of our ancestors and of bits of history, notably the stories of the Plague and the Great Fire of London. Although not a literary produc:ion, its every page is entertaining, and the frankness of the author amuses us not less than his inordinate vanity.
A Combsf of Exercises in Quantitatife Cifemistry: loy Harmon Northop Morse, Professor of Analytic Chemistry in Johns Hopkins University. Cloth. 556 pagㅇ. 1llnstrated. Mailing price, \$2.20. Gimm \& Company, Boston.
Beginners in quantitative chemistry will find Profeseor Morse's book a helpful guide. The work indutes those exercies rembired of students $\mathrm{i}_{11}$ chemintry at Johns: Ilonkins: (*niversity. and is at once allthoritative and praction. 1 is designed to familiarize the pupil with as great a variety
of quantitative operations as is practicable in a limited amount of time, and to bring the student to that state of proficiency which will enable him to proceed further with but little guidance from the instructor. Special attention has been given to all those points which contribute to accuracy. The last chapter is devoted to a description of certain new devices for heating by electricity, and to a new electrical method for the combustion of organic compounds. These proccsses have been recently developed $i_{11}$ the author's own laboratory.
"Tales Easy and Small for the Youngest of All," "In Holiday Time and Other Stories," "Maud's Doll and Her Walk in Picture and Talk," "Old Dick Grey and Aunt Katie's Way." These are bright stories for very small children, prettily illustrated and full of interest. Onc looks in vain for a word of more than one syllable. They are good specimens of simple every day English, and the subject matter is just what children enjoy-stories of things and people about home. In paper covers, price 2 d . each. Blackie \& Son, London. "The Butterfly's Party," (from the Russian) is a pretty conceit, designed for readers a little more advanced. In Blackie's "Story Book Readers," price Id.

School Recitations. Book I (for juniors). Books 2 and 3 (for seniors), paper covers, price 1 d . each. Blackie \& Son, London. A capital series and the price within the reach of everybody. The recitations are well chosen, and make good subjects for a Friday afternoon programme.

Blackie's " Model Arithmetics, book I, price 1 $1 / 2 \mathrm{~d}$., and book 3, price 2 d . There is an abundance of examples for junior and senior grades.

Blackie's "Little French Classics" series provides students with low priced selections from great French writcrs, a great boon to teachers and tanght. Numbers received are Vigny's "Glimpses of Napoleon," Masson's "Les Enfants Célèbres," and "Longer Poems for Recitation." All with notes. Price 6d. each. Blackie \& Son, London.
The Soldier's Historical Geograpiiy of the British Empire. By J. C. Ellis. Linen. Pages 96. Price 8d. Blackie \& Son, London.
A very concise and interesting account of the various portions of the British Isles and colonies. The part relating to Canada is up to date. in that the two provinces of Alberta and Saskatchewan are included, but among the important seaports St. John is not included.
Webster's Modern Dictronary. Adapted for intermediate classes. Compiled by E. T. Roe. Cloth. Pages 458. Price 30 cents. Laird \& Lee, Chicago.
This dictionary for children promises more than it fulfi!s in claiming to be standard and up-to-date. Its cheapness and good binding are in its favour.

In Blackie's Latin Texts, Book V, Livy, price 18 pence has a brief introduction dcaling with the anthor's life and works, his style, and the subject of the book. A new and important feature in the introduction is a brief note on the MSS. and the principles of textual criticism, which are illustrated by a few selected critical notes at the foot of the text. No other notes are given.
Tife Picture Sifakespeare-The Twelfth Night. Cloth.
Pages 144. Price is. Blackie \& Son, London.
This beautiful little volume, which is the sixth of the
series, will prove a delight, like its predecessors, to all lovers of Shakespeare. It is tastefully bound, and the illustrations and text attractive. The introduction and notes are concise and to the point.
A German Reader. Compiled by W. Scholle, Ph. D., and G. Smith, M. A. Cloth. Price 2s. 6d. Blackie \& Son, London.
This book is illustrated, is excellent in textual features, the reading material compiled from the works of leading authors, has notes and vocabulary, and a fine selection of German songs with music.
Der Geissbub von Engelburg. Von Julius Lohmeyer. Edited with notes, vocabulary, and material for conversational exercises in German. Cloth. Pages 182. D. C. Heath \& Co., Boston.

The scene of this little story-"The Goatherd of Engelberg "-is laid in Switzerland, near the lake of Lucerne, with the fascinating panorama of snow-capped mountain peaks and glittering glaciers, and in the midst of places connected with historic scenes of Wilhelm Tell. It is written in sympathy with boys, as the frontispiece, representing a boy botanist helped up the side of a nearly precipitous cliff by companions may show, and is a combination of travel, adventure and nature-study.

## RECENT MAGAZINES.

The Allantic Monthly for October is particularly rich both in the incisive and well-considered discussion of important public topics and in literary papers, essays, stories and poems, of the most attractive quality. Among the most thoughtful and suggestive articles is that by Col. Thomas Wentworth Higginson on the Cowardice of Culture, written with an earnestness that will furnish food for reflection.
The October Canadian Magazine celebrates the completion of its 25 th volume with a special anniversary number. This fine record marks a quarter of a century's literary progress, in the development of which this magazine has taken a prominent and useful part. The October Canadian, which is a finely illustrated number, gives promise of greater fulfilment in the future. Canadian literature, public questions, poetry and fiction, to which twentyfive well-known writers contribute, make up a noteworthy issue.

The Chautauquan for October continues its valuable series of studies on the life and customs of eastern peoples -Indians, Chinese, Japanese-interesting to general readers and students.

Recent numbers of Littell's Living Age contain some of the best articles from the leading English magazines on literature, art, public questions, education. Its weekly visits are appreciated by its many readers who wish to keep informed on literature and current topics. Consult the advertisement on another page of this number of the Review.

The Novenber Delineator presents a most attractive appearance. The table of contents contains, among its many features of interest, an article, the second of two, by Dr. William H. Maxwell, superintendent of schools, New York City, on Education for Life through Living, which describes the routine of a great public school.

EDucational Revicw 5upplement,- December, 1905.


CHRISTMAS CHIMES

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# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.
Published Monthly. ST. JOHN, N. B., DECEMBER, 1905.
G. U. HAY,

Editor for New Brunswick

## A. McKAY

Editor for Nova Scotia.

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Tine Chief Superintendent of Education for New Brunswick, Dr. J. R. Inch, requests the Review to announce that teachers who may find it necessary: to close their schools on Thursday, December 21st, in order to enable them to reach their honies before the following Sunday, have permission to teach on a preceding Saturday, as a substitute for Friday, the 22nd December, which is according to law the last teaching day of the term.

The schools will re-open after the Christmas holidays on Monday, January 8th, 1906.

Dr. J. L. Hughes, inspector of schools, Toronto, recently delivered three addresses in St. John on kindergarten training. Dr. Hughes is a man of ideas, has a fine presence and great personal magnetism. His addresses dealt with the broader aspects of education, and produced a marked impression.

Hay's History of Canada, including a sketch of the history of Prince Edward Island by Miss H. M. Anderson, has been authorized for use in the schools of that province.

The Summer School amouncement in another column presents attractions for next mid-summer vacation. Cape Breton is unsurpassed in these provinces for beauty of natural scenery, and the course of study in the forthcoming calendar promises to be of even greater excellence than usual.

In the November Review a paragraph of a dozen lines on "Teaching Literature" should have been credited to the Western School Journal, insteat of to "Exchange." The omission occurred in neglecting to credit the clipping at the time it was cut from the pages of our esteemed western contemporary.

The art picture in this number is a beautiful and appropriate souvenir of Christmas. The notes by Mr. Boyd and Mr. Kidner's excellent plans for framing this and other pictures of the series will be appreciated by readers. If our subscribers will make use of these art pictures for decoration and lessons the purpose of the Review will be served. They add materially to the expenses, both for printing and prostage, and subscribers can show their appreciation by paying promptly and in advance for their paper.

There is a matter that has aroused considerable bitter comment concerning one of our higher institutions of learning and its estimable principal. The Review has avoided taking part in an unseemly controversy, but candour compels it to say that the discussion seems out of place and contrary to the spirit which should animate lay and clerical teachers, or a community which has been especially liberal towards education. Principal Soloan has already done much good work in Nova Scotia, in spite of disadvantageous circumstances. He is capable of doing much more, if people who should be helpers, not detractors, join in helping him to greater accomplishment.

It is a pleasure to comment upon the conservative methods employed by the G. \& C. Merriam Company in the publication of the Webster's International Dictionary. Not every little slang word or phrase is put into the book regardless of its scholastic or linguistic qualities. It is this conservatism backed by the scholarship of the editor-in-chief William T. Harris, Ph.D.. LL.D., United States Commissioner of Education, and hundreds of others of the greatest educators of this and other nations which has made the International a standard in the United States Supreme Court and in all the courts of the nation, as well as in colleges and public schools.

An educational journal, or any journal for that matter, may be judged to a certain extent by the class of advertisements in its columns. To parade quack medicines, some of them filthy, complexion "beautifiers," fakes that promise something for nothing, prominently in columns where the subscriber expects his usual reading matter, is hardly treating him with respect, for if he is a discriminating reader he is quick to resent an intrusion that is on a par with a tramp unceremonionsly entering a privileged fanily circle. If such advertisements are to be admitted to papers, let them be put in the columns where they belong.

People who are temperate in eating and drinising, get as much pure air and exercise as possible, and avoid anxiety, have no need of patent medicines or "beautifiers." If they require medical assistance let them consult a reputable physician.

## The Affairs of King's College.

It is scarcely two years since that the announcement was made and hailed with widespread satisfaction that King's College was to enter upon a new era of usefulness under the presidency of Dr. I. C. Hannah, an able scholar and administrator. His energy and engaging personality attracted to him many warm friends wherever he went and addressed andiences; and it seemed indeed that the object of the many friends of that ancient institution, to establish it as an independent university, was about to be realized. With this aim in view it was decided to raise $\$ 100,000-n o t$ a large sum when we think of the wealth of the church of England compared with that of other denominations who have given much more for like
purposes in recent years. It was also decided to move the engineering school to Sydney, to secure a really important part of the higher educational work of the Province. It is now recognized, howcver, that no large sum can be raised, money being urgently needed by the Church of England for other purposes. On hearing this, Dr. Hannah proposed either to restrict the scope of the institution to divinity in Windsor, engineering in Cape Breton and law in St. John, or preferably to seek federation with some other university for the sake of greater efficiency and to enable the divinity school to be put on a really up-to-date footing. So far the governors have not seen their way to take any definite step,-a course of action which, if persisted in, must obviously entail the president's early resignation, a result which would be little less than a calamity to King's at the present time. The questions naturally arise-do the people of the Church of England appreciate sufficiently their ancient denominational college? Have they educated themselves sufficiently in educational giving?

## Writing in the Public Schools.

The report of Supervisor McKay, Halifax, on the teaching of writing in the public schools is a very complete survey of the whole subject, and additional interest is given to it by the mass of expert testimony which he quotes. Mr. McKay has taken such pains to go into the details of this important subject that every teacher would be benefited by careful study of his report, which is published in pamphlet form, and the practical conclusions at which he arrives. Teachers and all reasonable business men will give their adhesion to the sensible opinion, that "The interests of the great majority of the public will be fully served if the writing of the schools is legible, uniform and of moderate speed. Anything more than that would deprive the pupil of the necessary drill in other subjects of more general use. If he desires to become a specialist in business writing he should take a special course in a business college, or serve for some time in an office where he will soon acquire the necessary speed, dexterity and technical skill." If teachers on their part devoted themselves to secure results, which are undoubtedly within their power, and business men accepted the results as all that can reasonably be expected from the public schools, we should have few complaints about illegible, careless penmanship.

## Only of Interest to a Few.

A specialist in one of our schools writes to say that he must give up the Review because he does not find much in it about his own particular subject. Perhaps if he were more of the teacher and less of the specialist the Revew might help him.

A teacher who left these parts some years ago without sending any notice of change of address or her desire to discontinue (may their shadows ever grow less!) writes to the Review as follows from a distant home: "Please find enclosed postal notes for $\$ 3.75$ in payment for three and threequarter years' subscription. It is almost a shame for me to have been so neglectful in forwarding this amount, for I must say the Review is a paper every teacher shoukd read"-(and pay for). "I am now way off here. My teaching days are over, and I now devote my time to a Sweet Baby Boy, and to helping my husband."

Subscribers sometimes wish their papers discontinued. It is only a slight trouble in such cases to drop a card to the publisher, stating the fact. This is pleasanter and more satisfactory than to refuse the paper at the post office, which is rather rarely done. We are always sorry to lose a subscriber, but we do not wish to force the paper on any one. Just now we are happy to say the prospects of the Review, just entering on the last half of its twentieth year, are brighter than ever before, and its subscription list is growing encouragingly.

Now that is all, clear reader. We have referred to some disadvantages, but we could not begin to tell of the happiness that thousenc's of grateful teachers during the past score of years lave brought to us by their sincere and hearty appreciation of what the Review has been to them. They are not merely "our readers": many of them have been and are now warm personal friends, whether we have seen their faces or not. To all the Review extends its hearty congratulation:, wishing them a Happy Christmas and New Year, and the joy that comes from work conscientiously and faithfully performed.

A subscriber to the Review who has recently setthed in the West writes from Regina as follows: "I cannot too warmly express my appreciation of the Revifw and its unfailing interest and helpfulness cluring the several years I have used it in my work."

## Animal Stories.

Red Fox, by Chas. G. D. Roberts; Northern Tralls, by Wm. J. Long. The Copp Clark Company, Toronto.

The interest in animal stories apparently shows no sign of waning, and one realizes why it does not as he turns the pages of the books named above, so charmingly illustrated and so full are they of the atmosphere of the woods. There is the fictitious element in all these stories just as there is in the stories about men and women; but who will say that the observer of animals in their wilderness haunts camot successfully analyze some of the common experiences of these creaturestheir joys, fears, hates, the sometimes more than human cunning and skill that they show in providing for the safety of their young, in procuring food, and avoiding or overcoming their enemies?

Ar. Roberts tells us in his introduction to the biograply of a "Red Fox" that in a litter of young foxes there is usually one that is larger and stronger, more sagacious than his fellows. Such a one he makes the hero of his story. He does not pretend that all that happens to this fox, all the scrapes that he so cunningly gets out of, happened to any one animal, but he is confident that "Every one of these experiences has befallen some red fox in the past, and may befall other red foxes in the future." There does not appear to be anything inprobable in all the situations and vicissitudes of Red Fox's life and adventures, and Mr. Roberts las presented us with a most interesting story of what, in woods' life, might be termed a "character." The beautiful illustrations by Charles livingston l Bull add greatly to the attractiveness of the book

The scenes of Mr. Long's "Northern Trails" are the wilds of Newfoundland and Labrador, and he pictures life in the family of Wayeeses the White Wolf, Kiopsecp the Salmon, Natwock the Polar liear, and other people of the woods and waters. The illustrations, covering almost every page, are admirable, and show so many phases of wood life and nature that the book is a treasure house in this respect. The descriptions are picturesque and appeal to the nature-lover. It is well known that Mr. Long bas many sharp critics who have accused him of describing as seeing what le does not see in his wilderness journeys. We do not wish to enter into this discussion at present. In this book, perhajs, he is a little more careful of his statements, and tells us he has taken "the
facts from first-hand and accurate observers," and has "sifted them carefully."

There remains, after one has read these two books, a fuller sense of the delights of the woods and a greater respect for the life of animals. And these are some things that add immeasurably to the pleasure of life.

## A Lover of Scott.

I cannot help taking fire at anything said in disparagement of Walter Scott. I feel that I have got from his writings, not only immense pleasure, but some good. He was a truly noblehearted gentleman, a model of that class, and his character is impressed on all the works of his pen. A type, he seems to me, of social chivalry. In all his writings, too, there is the buoyancy of perfect health. In reading them you breathe the air of the Scotch hills. I can conceive no better mental febrifuge, no better antidote to depression, no more sovereign remedy for dull care. . . .

Scott, like Homer, Virgil, Tasso, and Milton, is a narrative poet, and must be judged by the interest of his story and by his poetic skill in telling it. Is not the story of Marmion interesting? Is not great poetic skill shown in telling it? Is not the character of Marmion one that yon never forget? Is not the judgment scene in Holy Isle supremely tragical? Can anything be much brighter than the picture of Edinburgh and the Scottish camp? Has anything in English literature more of Homeric spirit than the battle scene of Flodden? Are we not carried along through the whole poem, as it were by a sea breeze fresh and strong? Are there not ever and anon charming little touches, such as the lines at the end of Marmion, telling us how the woodman took the place of the Baron in the Baron's sumptuous tomb?

One must, no doubt, have something of the boy left in one to read Marmion again with delight. But he who reads Marmion wholly without delight cannot have much left in him of the boy. . . .

However, one might almost as well try to argue a, man into or out of love for a woman as into or out of taste for a poet. Boys will be boys, and will persist in venerating Browning and loving Scott.

Goldwin Smith, in the Atlantic Monthly.
The Educational Review and Canadian Magazine (subscription price $\$ 2.50$ a year), both for $\$ 2.50-\mathrm{a}$ rare offer.

## Nature-Study.

## Hints for Occasional December Talks.

We have been so busy, perhaps, in our own preparation for winter that we have not observed how Nature has done her work. How did trees and shrubs get ready for winter? Most of them have lost their leaves, and the food material is stored in roots, trunks, branches and buds waiting for the warm rains and the sun of another spring. A great many plants have died, but sufficient of their seeds are stored away in some safe place to reproduce their kind for the next season. Under the snow the seeds, buds and roots are protected, but there is no growth. Nature seems now to be taking a rest.

Most of the animals have crawled into warm places to sleep away the winter. The chipmunk, with its store of fruits, is snugly living in its underground burrow. The red squirrel from its secure nest in some lofty tree will take long naps, to go forth at intervals, when hunger drives him, to the nuts he has hoarded up in the places that he remembers so well. Most of the birds have gone south. Is it because of the cold or because of scarcity of food? Many insects are waiting in their cocoons for the early days of spring; animals that are exposed to the cold have put on a warmer coat,-their fur or other covering has been made thicker. Nature has provided for all her numerous children, and they are as comfortable as boys and girls in their warm houses.

Have your pupils keep a weather record if they are not now doing it. Note from the thermometer the degrees of cold at nine, twelve and four o'clock, and make up the average for the school day; afterwards for the month. Keep the record of the winds and their direction, the sunny and cloudy days, snow and rain storms. This does not take up much time, and will help to keep up the interest in out-of-door study during the winter. The sports -skating, snow-shoeing, coasting-may be trusted to look after themselves.

Note the position of the sun, at rising, midday and setting. Soon we shall have the shortest days of the year.

The stars are every night becoming more interesting. Jupiter now rises in the east about five o'clock, with the Pleiades above and the Hyades below, and splendid Orion in full view a few hours later. Have readers of the Review been following the course of Jupiter between the two groups of stars named above during November? To which
group is it drawing near? Notice its movements this month, and continue the drawings at intervals during the month.

## Our Native Trees - The Evergreens.

BY G. U. HAY.


#### Abstract

"Above all, I glory in my evergreens. What winter garden can compare for them with mine? True, I have but four kinds-Scotch fir, holly, furze, and the heath; and by way of relief to them, only brows of brown fern, sheets of yellow boggrass, and here and there a leafless birch, whose purple tresses are even more lovely to my eyes than those fragrant green ones which she puts on in spring. Well, in painting as in music, what effects are more grand than those produced by the scientific combination, in endless new variety, of a few simple elements? Enough for me is the one purple birch; the bright hollies round its stem sparkling with scarlet beads; the furze-patch, rich with its lacework of interwoven light and shade, tipped bere and there with a golden bud; the deep soft heather carpet, which invites you to lie down and dream for hours; and behind all, the wall of red fir stems and the dark fir roof with its jagged edges a mile long, against the soft gray sky. "An ugly, straight-edged, monotonous fir plantation? Well, I like it, outside and inside. I need no saw-edge of mountain peaks to stir up my imagination with the sense of the sublime, while I can watch the saw-edge of those fir peaks against the red sunset. They are my Alps."-From My Winter Garden-Charles Kingsley.


## Firs and Spruces.

What better time to begin the study of Evergreens than in December, when their fresh green tints are in such marked contrast to the white of the first snows? And as the firs and spruces are centres of the children's interest at Christmas, let us begin with these.

In searching out in the woods a symmetrical cone-shaped fir tree, notice that the stem, thickest at the base, continues in an unbroken line to the top. Is this true of all evergreens? Of decidnous trees? Of all deciduons trees? Rend down one of the horizontal branches of a fir or spruce tree. Notice how it flies back to its place. Examine the firm polished surface of the leaves, their small size. Note how these cone-shaped trees, with pendent branches and polished leaves, are fitted to withstand winter storms and free themselves from a weight of ice and snow.

The balsam or balm of Gilead fir (Abies balsamea) is a slender, graceful forest tree, growing in clamp woods or mountain swamps. Not unusually it attains a height of from sixty to eighty
feet in localities where it flourishes best. Sometimes it occurs as a low shrub. It bears some resemblance to the black and red spruces, but the surest way to tell it from these is to examine the bark which is smooth and swollen into "blisters" containing resin or balsam. This resin is found on the bark, buds and concs, and is familiar to all who have sticky fingers from handling fir trees. Other characteristics of the fir are,-the fragrance from its leaves when bruised or dried, recalling "fir-pillows" and camping-ont on fir boughs; its upright cones, two to four inches long, arranged in rows on the upper side of the branches, and violet-purple when young; its leaves flat, differing from the narrower somewhat four-sided leaves of spruce, dark green above, lighter beneath, with a prominent mid rib. Its wood is soft, weak, whiter than any other wood, close grained; weight of a cubic foot, twenty-four pounds. It is pretty wood for interior finishings, but does not stand exposure to the weather. Owing to the fact that it imparts no flavor. fir is used in the manufacture of butter tubs and boxes. The balsam obtained from the blisters, known as Canada balsam, is the chief produet of this tree. It is used in medicines, for varnishes, mounting microscopic objects, etc.

There are three kinds of spruce in these provinces. They differ from the fir in laving bark more or less rouglı and withont balsam blisters. The wood of spruces is more valuable than that of the fir.

The white spruce (Picea alba) is a northern tree and is more common near the seacoast. It has a strong odor, and from this it is often called the skiunk spruce. Its young twigs are smooth, that is, without small hairs; the leaves slender and of a pale, light green colour; its cones are smaller than those of the fir, nodding, not upright, and do not stay on the tree from year to year as do those of the red spruce. The wood is soft, light yellow in colour, and a cubic foot weighs twenty-five pounds. It is used for the masts of smaller vessels, flooring and other purposes, and though commercially less valuable than red spruce, it is often sold with the latter. Commonly seen, it is a somewhat small tree, though in many places it attains to large dimensions. The pale colour of its bark and leaves separate it from other spruces.

The red spruce (Picea rubra) is the common spruce of our forests, and is usually known among lumbermen as the black spruce. Its young twigs are pubescent or hairy, its cones somewhat the size of a robin's egg, but longer, curved, and staying
on the trees for more than one season. It grows from fifty to one bundred feet in height, and one and a half to four feet in diameter. The wood is soft, pale red or nearly white. A cubic foot weighs twenty-eight pounds. It is largely used for building timber and for clapboards and shingles. It is exported in great quantities and is used for interior furnishings of houses, sheathing, dry goods boxes and for many other purposes. Great quantities are consumed in the pulp mills, and it is the favorite wood for the manufacture of paper. It is a tree of slow growth, Iarge specimens in the primitive forests being often two or three centuries old. Notice the thin circles which show each year's growth at the ends of a spruce log. Try to count them. When growing in open fields the red spruce often forms a conical head, with the branches, especially of the younger trees, brushing the ground. In the more typical development, especially when in crowded forests, the lower branches soon perish, leaving the long naked trunks which the lumberman prizes. Why is the trunk branched in one instance and naked in the other? It is the most abundant of all our trees, and is now the greatest source of the forest wealth of New Brunswick and Nova Scotia. The vast evergreen expanse of our forests is made up chiefly of this spruce.

The black spruce of our swamps is a slender tree with a jagged irregular top. When found on wind-swept hills or mountain tops it is littie more than a shrub.

## December Birthdays.

Eli Whitney, inventor of the cotton-gin, born December 8, 1765 ; John Milton, the great poet. December 9, 1608; Edward Eggleston, author, December 10, 1837 ; William Lloyd Garrison, antislavery leader, December 12, 1804: Sir Humphrey Davy, December 17, 1778: Ludwig Beethoven, musician, December 17,1770 : Kepler, the noted astronomer, December 27, 1571: Gladstone, the great British statesman, December 29, 1809: Cartier, the noted French explorer, December 31, 1494.

Gather all the facts you can about these, and write notes on each. It is of interest to know that the grandfather of Williams Lloyd Garrison, Joseph Garrison, was in New Brunsuick as early as r773. A son, Abijah, father of William Lloyd Garrison, was born that year ; Fanny Lloyd, his mother, was born on Deir I-land, N B., in 1776 The family returned to Newburyport, Mass., where William Lloyd Garrison was born in 1805.

## The old Year and the New.

Reading.-"The Old Year and the New."
(For several Children.)
A cold gust of wind blew, and a fresh-faced boy with roguish eyes tripped through the door of space to the earth.
"Happy New Year, January," said a low, dreary voice.
January turned his head and looked at a bent, feeble old man, with a long beard, clothed in a wrapper of gray.
"Why, who are you?" said January, surprised.
"I am 1905," replied the Old Year; "and you are 1906, are you not?"
"Yes; I ann the first part of 1906; but I have eleven brothers and sisters, who are coming later."
"Since you are a little boy, I will give you some advice," said the Old Year. "You must try to make as many good things as you can happen in your year."
"All right; go on," said Jantary, seating himself on a snow-bank, and looking up at the stars.
"Be as pleasant as you can. Bring plenty of snow for the boys and girls, and sunshine, too. When you bring a snow-storm, bring one, and make a fine one of it."

So he went on, giving the boy plenty of good advice.
l'resently he jumped a little, and said, "I am going now. Good-by."

With that he faded into mist and was gone.
January was sober for a few minutes, but then he set about making a fine snow-storm.

The next day be heard some children, who were skating to and fro, say, "Isn't it fine! The New Year has begun well."
And January was pleased.
-St. Nicholas (adapted).
When the first whisper is heard in the room, sit down and have a talk with the children. Ask them if they like to be disturbed by noises when they are busily at work. Let them understand that whispering is no crime; it is only when it becomes annoying to others that it is troublesome. Now if any child wishes to talk with his neighbor, let him raise his hand and ask to do so, then no one will mind the sound.

There may be several requests at first, but it is noticed that when a child knows he may whisper by simply getting permission, he very soon ceases to care for the privilege.-Primary Education.

## Washington Irving, 1783-1859.

Principal G. K. Butler, M. A., Hallfax, N. S.
[Washington Irving's father, at one time in the English navy, settled in New York previous to the Americin Revolution. Here Irving was horn. He went to school at the age of four and left at the age of sixteen. His elder brothers attended Columhia College, but he did not.

He studied law. but never practised to any extent. In 180, he went to Europe for the benefit of his health, visiting Italy and France. In 1806 he returned to America. His first important work, "The History of New York." was published in 1809. This was a success, both literary and financial.
In 1815 he again went to Europe, this time to England. While there he met Scott, of which meeting an account can be found in Lockhart's "Life of Scott." In 18:9 appeared the first number of the "Skelch Book," containing "Rip Van Winkle." In 1826 he went to Spain; while there he collected material for his "Conquest of Granada" and his "Alhambra." In 1832 he returned to America, where he lived until 1842. when he was appointed Minister to Spain. After four years in Spain he returned to New York, where he lived until his death.
He is considered the most popular of American writers down to the present time. During his lifetime about 600,000 copies of his works were soll, and since that time the average annual sale has been about 30,000.]

## The Legend of Sleepy Hollow.

If the hints as to word study, given in other papers of this series, have been taken, it will be needless from this on to specify particular words. Consult the dictionary as to all words not perfectly plain to children. Have them express unusual ones in their own vocabulary.

Page 36.-l. t*-Why apply adj. "Sabbath" to "stillness"? Is bis time for especial quietness true to nature? 1. I6. What Indian tribes dwelt here? 1. 17. What more do we know of Hudson and bis discoveries? 1.25. For the meaning of "starsshooting," etc., compare-
"When beggars die there are no comets seen,
The heavens themselves blaze forth the death of princes."
Page 38.-1. 2. The best known character in our own literature from the State of Connecticut is Sam Slick. Many of the early settlers of western Nova Scotia came from that State. 1. 16. What is meant by a "genius of famine"? 1. 37. Why apply "golden" to the maxim? Compare "speech is silvern but silence is golden." In 1. 35 what figure of speech in "the flowery path of knowledge."

Page 39 contains a reference to the okl custom, probably now extinct of "boarding the teacher round."

[^5]Page 41.-l. 14. What is meant by his powers of "digesting" the marvellous? What New England town was especially famed for its witches? 1. 24. Why is the hour of twilight called the "witching hour," and why at that time are strange forms seen? 1. 33. Compare the use of the word "varlet" with the same word in Macaulay's "Virginia." 1. 36. Compare the singing of psalm tunes to banish "evil spirits" with a similar custom in the middle ages when the belief in them was so mttch more firmly fixed.

Page 42.-1. I. "In linked," etc., consult Milton’s Shorter Poems. ]. 15. When Capt. Slocum, who went around the world alone in the "Spray," visited l'resident Kruger, he most deeply offended him by saying he was sailing around the world, which Kruger believed to be flat.
lage 43.-1. 35. Many of your pupils may have seen a similar "little well formed of a barrel."

Page 44.-1. 2. The "flail" like the sickle is now largely a thing of the past in harvest operations.

Page 45.-1. 13. Kentucky and Tennessee are no longer the remote frontier states they were 120 years since. 1. 17. Compare the house with the house of Benediet in "Evangeline." 1. 34. How many of the present-day school children, or teachcrs either, ever saw "andirons" actnally in use? What is meant by" "their covert of Asparagus tops"?

Page $46 .-1$. 1. Compare "Deserted Village," page 7, 1. 1o, "broken tea-cups wisely kept for show:" 1. 7. "Kinght-errant" is quite different from the kind of knight Roderick is inclined to call James in the "Lady of the Lake." Find the place and compare the two. 1. 16. Daedalus, who built the original labyrinth, was lost in it himself, and escaped by making himself wings of wax and feathers.

I'age 49.-1. 18. Smoking out a teacher is one of the pleasures that probably none of the present generation has enjoyed.

Page 52-1. 8. Monteiro is a Spanish soldier's cap. 1. 31. Study word "goodliest." Quite different from "good."

Page 53.-1. 4. Inland pupils might be troubled as to the meaning of the word "sloop."
l'age 54.-1s. 2, 3. 'The dough-nut, cruller, olykoek, are forms of one and the same, a cake fried in lard. In richmess they vary as arranged above. Baltus Van Tassel's reception of his guests will call to mind that of lasil in "Evangeline," when she visits him in his sonthern home. [The old
gray-haired negro who officiated on the "fiddle" may recall a similar quite famous one in the eastern part of Nova Scotia, much in demand at country dances a few years since.]

Page 57 .-Sing-Sing is famous for its-?
Page 58.-By a misprint on this page we have "demagogue" for "pedagogue." What is the difference in meaning?

Page 59.-The story of "Andre"" might be worth looking into.

Page 6r.-1. r. Does hair stand on end through fear, and if not why do we say so?

What are the two ways of concluding the story, the one natural, the other supernatural? Which is the most likely to be true?

## Mama's Christmas Gift.

"Mama," said Billy, "what do you want for Christmas?"
"Dear me," said Billy's mama, "I don't know of a single thing that I want."
"But you must say you want things," said Billy. "You must-it's a sort of game. It doesn't matter whether you really want the things or not."
"Oh, I didn't understand," said mama, entering into the game. "Well, then, let me see. I should like a diamond pin."
"And what else?" said Billy. "You must want more."
"I want a long sealskin ulster."
"Say something else--say lots of things."
"I want a new carriage and a lace collar and some curtains for baby's roon."
"Mama," said Billy. coming close to her side and speaking earnestly, "don't you want a card like that one 1 painted this morning?"
"Oh, dear yes," said mama, quickly, "I should love to have a beautiful card like those you paint."

Billy went to the windlow and looked out at the snow, and the sparrows hopping on the walk that ran down to the street.

After a minute or two he came to mama's side again. "Mana," he said very solemnly. "I won't say which, 'cause I don't want to spoil your surprise; but one of those things you told me you want you're surely to get for Christmas."

Mama leaned over and kissed his bright little face, and said softly: "I do wonder which it will be:"-St. Nicholas.

The time for sending in the essays for competition in the League of Empire Prizes has been extended. See advertisement on page 175.

ART NOTES - No. II.<br>By Hunter Boyd, Waweig, N. B.<br>\section*{Christmas Chimes.}<br>Painted by Edwin Howland Blashfield, 1818.<br>" I heard the bells on Christmas day,<br>Their old, familiar carols play,<br>And wild and sweet<br>The words repeat,<br>Of peace on earth, good-will to men."

-H. W. L.
The picture selected for reproduction this month is as beautiful as it is scasonable. There is a sense in which its meaning is so obvious that some persons may think it undesirable to make it the subject of a picture study. Teachers who are in such a mood require only an opportunity for introducing the print to the class, and the evident pleasure afforded to such a teacher will soon be shared by sympathetic scholars. Possibly such persons will be satisfied to know that the artist is still living, and that though born in New York he not only studied in Paris, but actually produced this picture in Paris. It has since been exhibited at the World's Fair in Chicago, and helped to make the reputation which Mr. Blashfield bears as one of America's best figure painters. He certainly was filled with the Christmas spirit when he conceived this work of art, and his execution worthily embodies the beautiful idea. Not only are the faces of the angels all that can be desired; we note that the wings are graceful, and the folds of their garments are admirably arranged. The suggestion of movement is so powerful that we feel the heavenly bell-ringers are not only enthusiastic in their work,--they positively exult in doing it. The great bells swing in the tower which is illuminated by an unearthly light, and whilst the massive beams to which they are attached suggest their great weight, there is an entire absence of effort or strain on the part of the ringers. The happy birds that fly in and out of the belfry suggest that nature is in symıpathy with the glad morn, and we do not contemplate this scene very long without imagining we can detect the harmony of voices celestial, blending with that produced by the tongues of carthly bells. When this result is achieved we have learned the secret of the picture, and only harm may follow if a teacher attempts to discuss "Christmas chimes" without aming to secure or strengthen similar effects upon the scholars. The artist had a message, and he has told it in form
and colour, has told it so intelligibly that it loses little by reproduction in a small black and white print, and our hearty response is his reward.

In some respects the Poet Whittier has given a similar message in his poem, "A Christmas Carmen."

Sing the bridal of nations! with corals of hove,
Sing out the war-vulure and sing in the dove,
Till the hearts of the peoples keep time in accord,
And the voice of the world is the voice of the Lord! Clasp hands of the mations:
In strong gratulations:
The dark night is onding and dawn has hegum; Rise, hope of the ages, arise like the sun,
All speech flow to manic, zlit hearts heat as one!
Already we have several times used the word suggestion, and that is the function of this picture. It is suggestive. It appeals to the imagimative faculties, directly to the visual, and indirectly to the auditory. In this respect it may be compared with the "Angelus," by J. 1". Millet. where we note the effect of the evening bell upon the peasants in the potato field, although only the spire of the church is indicated in the background. Also as in that picture we have here a study in emotional expression. Other pictures that dejend for their clue upon some supposed sound, are "Listening to the Fairies," by bodenhauser, "The Song of the Lark," and Joan of Are listening to her fatal message. With this contrast "The lialloon," where there is no appeal to the sense of !earing, and other pictures may be selecterl and grouped under these several heads.

But not all teachers are sufficiently acopuanted with pietures to pursue immediately such exercise. and not all are engaged in teaching the higher grades. I.et us suppose the case of one who is bravely trying to make life interesting in an ungraded sciool in a remote country district. Little children in rural schools are as familiar with angels as those in the city schouls, possibly mure so, as many children of tender years, brought up in cities, are not wholly unaffected by the prevalence of materialistic notions, and the rush and bustle of a home life which leaves no time for reveric. But not every rural scholar has seen or heard bells of the dimensims shown in our pieture, and in these cases patience is needed if the teacher is to build up an adequate concept from limited ideas. In this case, probably in most cases. it would be well for the class to discuss the suhject of Pells in general before the picture is displayed, so that the artist's work may have more
varied auditory images to appeal to. The teacher can ask for word exercises from each scholar, preferably in writing, so that the exercises can be examined at leisure, and to avoid any ridlicule of dull seholars by so-called smart ones. It must be remembered that in this study places may be reversed. In arithmetic, exact answers must be required, and in grammar a word is in a certain gender or it is not. But in picture study no serious answer is without some value, and the most backward children should be encouraged to express their ideas. If a scholar attempts an explat nation of a picture, do not pay much regard to writing, spelling or grammar, at first,-you are seeking an opportunity to know the child's range of ideas in order to proceed from the known to the unknown. Thus we might ask questions concerning lells-door-, cow-, sleigh-, school.- for-signal-, railway-engine. Ask for particulars concerning the way in which liells are rung for a wedding, funeral, fire, church service, etc. Ask for any notalle occasions on which the bells have been rung-coronation, Mafeking Day, and so on. Make ennuiry concerning the following: Bellhammer, tongue, clapper. Compare ringing and thlling. dirge and kuell, tinkle and jingle. dong and "diny-dong," and words like curfew and chimes. All this must be done with a view to securing distinctuess of auditory images, and if possible to secure an idea of a great volume of sound produced lyy large metorlions bells in a tower. Encourage the chiddren to search for a picture of "The Jiberty Bell" or "The great Bell of Mascow," or others, and note any material concerning famous bell towers. ('ntil this is done it is of little use to say that the studies for the bells in our pioture were made in Florence in (iinto's Tower, and irom St. Xicholas in Blois. After such an exereise the children will be stimulated to note the difference in ornamentation of the two bells in "(hrismas (Chimes." the pesition of the "elath)per" in the upper one, and some details of the bean and fixtures, and the ropes. but let everythinge contribute to increasing the imaginary volmone of somach. Here and there at child maty bo fond who will observe and inguire concerning the strange figute in the right hand corner. Let some of the older scholars lount up the meaning of the word gargoyk, and then determine if this is anl instance.

Nuch could be said concerning the angels, but for scholars, angels are not th be :malysed but
enjoyed. A volume like "Angels in Art," by C. E. Clement, published by L. C. Page \& Co., Boston, will prove interesting, but it must be borne in mind that our object is to increase the appreciation of the beautiful, to ennoble the emotions, to cultivate taste, afford enjoyment, and make all hear "The Christmas Chimes."

## Picture Study Queries.

In this column only the substance of questions will be printed in order to afford more space for the replies. Most of the guestions this month are based on the subject dealt with in the November number of the Educational Review.-H. B.
E. L. W. asks bow pathos is manifest in manifested in the picture of the "Old Téméraire?" Because it represents the setting of the sun, the end of the career of a vessel, of the wooden navy indced, and the decline of Turner's power. The delicacy of touch, $c, g$. in treatment of the spars of the ship, was not surpassed in any subsequent work.
H. T. B.-The dark object in the right hand corner is a buoy. Probably the buoy was used for securing barges at night. Yes, it helps to suggest distance, by comparative size, and its angle helps the unity of the picture as it is parallel with the south benk of the Thames. The chimneys are possibly on buildings at Greenwich.
G. A. S.-You are quite right. Turner not only thought much of the sun, and frequently painsed it, he almost worshipped it. "The sun is God," were almost his last words, and "the window of his death-chamber was turmed towards the west, and the sun shone upon his face in it. setting, and rested there as he expircel."

Hecla.-Téméraire means "He who dares," "the one that dares." There were two ships of that name: the first taken from the Frencl in 1759. This one was built at Chatham, at Trafalgar, 1805 ; a prison-ship at Piymouth, 1812; a receiving-ship at Shcerness, 1819, sold at Sheerness 1838 , for $\$ 25,000$, and broken up at Deptford.
F. E. B.-There is some danger of over analysis. Some children will merely enumerate the items, and you will help them to understand the relation of these items, and the symthesis will be valueble to yourself and the schola:s.

Madge.-An excellent example. The "Constitution" or "Old Ironsides" was contemporary with "The Téméraire." Its centenary was celebrated in 1897 . It was recently in Boston harbour.
Ralph - See preceding answer, and read O. W. Holmes's poen, "Old Ironsides." Any life of Turner will give further partictlars. James R. Lowell has written on the picture. In the original. the chicf grandeur is 'Turner's treatment of the glory of the stin and clouds. but the picture grows on you as you gather particulars.
R. F. H.-Quite so, If you will consult Educational Review, April. igot. p. 2\%s, yont will find some hints on the character of subjects suitable for rural schools.

Max.-The picture in the "H. B." set to which yous alluse is called "a neighbomrly chat." It is ly Van l.ecmputten.
G. D.-Certainly it will give pleasure to receive some of the compositions by your scholars. See address at the head of Art Notes in this number.

## How the Mistletoe Grows.

The mistletoe for centuries has been one of the most important factors in Yuletide decorations, its use dating back as far as the Druids. The hanging of the mistletoe on Christmas Eve, between 11 and 12 oclock, in many homes is the beginning of the season's merrymaking. The bough is hung in a place where there will be no obstacle in passing under it, and the penalty for being caught beneath its branches all know.

The story of how the mistletoe gets on the trees is a most interesting one, writes Prof. S. C. Schmucker, in the Ladies' Home Journal. Covering the mistletoe twigs are pearly white berries. These come in the winter season, when food is comparatively scarce, and hence some of our birds eat them freely. Now when a robin eats a cherry he swallows simply the meat and flips the stone away. The seed of the mistletoe the bird cannot flip. It is sticky and loolds to his bill. His only resource is to wipe it off, and he does so, leaving it sticking to the branches of the tree on which he is sitting at the time. This seed sprouts after a time, and not finding earth-which indeed its ancestral habit has made it cease wanting-it sinks its roots into the bark of the tree and lhunts there for the pipes that carry the sap. Now the sap in the bark is the very richest in the tree, far richer than that in the wood, and the mistletoe gets from its host the choicest of food. With a strange foresight it does not throw its leaves away, as do most parasites, but keeps them to use in winter when the tree is leafless.

When my school has often been restless I have asked them to lay aside all work and be ready to do as I told them. I would then stand before the pupils and say, "I am thinking of a name of an object in this room, beginning with ' $w$ ' and having six letters." (Window.) When the pupils thought it ont they would raise their hands and then some one would give the word. Often we would find many words answering the same description. This is good for geography work. Names of rivers, cities, momntains, flowers, animals, etc., all furnish good material. The pupils thoroughly enjoy it and I believe that good results are obtained.-Popular Educator.


## Framing the "Review" Pictures.

T. B. Kidner, Director or Manual Training.

The educational value of a well decorated rom cannot be over-estimated. Some of the simple frames suggested above may help teachers and pupils towards more helpful surroundings-more inspiring thoughts.

If your school has a regular manual training department, where wood and tools are available, several sorts of frames are possible. It the Kiugston Consolidated school, a continuous frame (Fig. I) was fixed along the tops of the blackboards and inclined forward slightly. The frames are of whitewood, stained a dark brown. the section of the mouldings being shewn at Fig. 2. The pietures are not fastened in, and thus may be taken out for eloser study or exchanged with other rooms. A better plan still is to put these continuous frames over the dado in the school hall: this being at a more convenient height for the children.

Inother grod plan is to frame the pictures in groups of three as in Fig. 3. Openings of suitable size are cut in a plain board, one quarter uf an inch thick; small strips being tacked to the back to form the places for the pictures and glass.
"Oxford" frames (Fig. 12) and plain mitred frames (Fig. II) are also easily constructed in the manual training rom.
If wood be not available, cardboard will prove a satisfactory and suitable substitute. A piece of grey "mounting board." 22x28 inches, costs 15 cents, and will cut into four mats or mounts. The pictures should be trimmed so as to have a white margin of three-guarters of an inch in width and then pasted carefully upon the grey cardil) aratl. Thas mounted, several mothods of framing are possible.

The popular "passe-partout" binding may be used with grood effect, the binding serving to hold the glase and cardlowarl together. Varions arramgements of the pieture may be make (see Fige.

4 and 5), such as grouping them according to artist, subject or shape, as the case may be.

Another simple plan is to take stout straws-rye preferably-and to sew them side by side as in Fig. 13. Very effective frames can be made in this way, as the straw can be dyed in pleasing colours and the corners of the frame embellished with ribbons.

Recently while visiting a primary department where the handwork is a specialty, the writer saw a pleasing frame formed by pasting a number of the small folded paper frames (stage $4[b]$ in the New Brunswick manual training schedule) round the edges of the cardboard mount (Fig. 6). Another simple but good frame was made by using white cardboard for a mat and pasting leaves cut out of coloured paper all round the borders (Fig. ю).

A good edging for the card mounts can be made by sewing the folded paper "cat's ladder" round the edges (Fig. 9). Such a finish would be quite suitable outside the leaves of Fig. 10.

Raffia, that useful and charming material, offers many possibilities for simple frames. Many of our teachers are already familiar with it and its manifold uses, but those who are not can easily obtain some from the nearest florist. It is sold in one pound hanks, and in its natural state is a pale golden yellow, but can be obtained from certain school supply houses dyed in several colours. Woven or braided into suitable widths it can be sewn to the cardboard mount of a picture with good effect. A more simple method is to use common "straw" board-the yellow material used in making milliners' boxes, etc.-in which to cut an opening of suitable size for the picture, a margin being left, say, two inches in width. Round this margin the strands of raffia are wound as shewn in Fig. 8. By rounding the outer corners, the difficulty occasioned by the slipping of the raffia at the angles can be obviated.

A substitute for raffia in the last method may he found in the leaves of the common "cat-tail," which are readily obtainable in most districts. They should be gathered in the autumn and dried. but must be dampened slightly before winding on the cardboard frame. I few crimson maple leaves glued to the face of the frame after the cat-tail leaves are in place, will complete a very attractive frame at a trifling cost.

Tife Educational Review and the Scientific American (subscription price $\$ 3$ a year) both for one year for $\$ 3.50$.

## Christmas Recitations.

The tollowing selections are sent to the Raview by Miss G. F. Crawford of Nictau. N. B. 1

A Telephone Message.

"Ah! here's the little round thing my papa talks into
To tell the folks down-town what he wants to have them do.
I'm going to try myself -now let me get a chair,
And then l'll stand on tip-toe so I can reach up there.
"Hallo?-(that's what they all say)-you dear old Santa Claus,
I'm going to have a little bit of talk with you, because I want to tell you all about a little girl I know
Who never had a Christmas in her life-she told me so!
" I hardly could believe it, but she says 'tis really truc.
I'm sure you're always kind, but I'm surprised at you,
That you should have forgotten such a litile one! but still,
You have, perhaps, already all the stockings you can fill.
" But could you go to her house instead of coming here?
For mamma says thet Christmas is the time of all the year
For children to remember poor little girls and boys
Who never lang their stockings up for picture-books and toys.
" I want you, please, to carry her a doll with shiny curls, And eyes that shut and open-that's the kind for litt!e girls-
And a miff to warm her fingers, and a cunning little ring,
And a book with pretty verses-how she'll laugh, the little thing!
"And give her lots of goodies, too, because she's poor, your see,
And ought to have more sugar-plums than you could bring to me.
Now tell it on your fingers, and remember as you goJust pack her stockings to the very, very toe.
"That's all-only. Santa Claus, I just would like to say, If you should have more presents than you need on Christmas day,
And would leave me just a few as you pass the chimney -why,
Of course-I would be very glad indeed. Good-bye! Good-bye!
-Selected.

## A Real Santa Claus.

Santa Claus, I hang for you By the mantel, stockings two; One for me, and one to go To another boy I know. There's a chimney in the town Yon have never travelled down. Should you chance to enter there, You would find a room all bare; Not a stocking conld you spy, Matters not how you may try; And the shoes are such

As no boy would care for much.
In a broken bed you'd see
Some one just about like me,
Dreaming of the pretty toys
Which you bring to other boys.
And to him a Christmas seems
Merry only in his dreams.
Ali the dreams, then, Santa Claus,
Stuff the stockings with, because
When they're filled up to the brim l'll be Santa Claus to him!
-Frank Dempster Sherman.

## Bells Across the Snow.

O Christmas, merry Christmas! is it really come again?
With its memories and its greetings, with its joys and with its pain.
There's a minor in the carol, and a shadow in the light,
And a spray of cypress wining with the holly-wreath to-night;
And the hush is never broken by laughter, light and iow, As we listen in the starlight to the bells ceross the snow.
O Christmas, merry Christmas! 'tis not so very long
Since other voices blended with the carol and the song.
If we could but hear them singing as they are singing now;
If we could but see the radiance oi the crown on each dear brow-
There would be no sight to smother, no hidden tear to Hlow as we listen in the starlight to the bells across the snow.
O Christmas, merry Christmas! this nevermore can be:
We cannot bring again the days of our unshadowed gles;
But Christmas-happy Christmas, sweet herald of goot-will-
With holy songs of gladness, brings holy gladness still; For peace and hope may brighten and patient love may glow,
As we listen in the starlight to the bells across the snow. -Frances Ridley Hazergal.
GoD's mikD.
|Sent by Mtss Mary l. Weston, Yarmoulh County.|
All might long the snow had fallen,
Wild the wind and fierce the cold; Morning saw the world white-crowned.
Like a pilgrim. hoar and old.
Down the lane came dancing footsteps,
Herry voices laughed agay;
"Brother, see, a dear ded robin!"
Cried in pity little May.
Then the little girl stooped gently.
Took the robin, and whispering low,
" "Tis one of cod's birds, brother.
And He saw it fall, you know."
"Well it is dead,--and we can"t help in,"
Said the boy, and hurried past ;
But the little maiden lingered,
To her breast the dead bird clasped.
As she stroked its soft, brown fathers-
"Did it really?-was it true?"
Yos, it fluttered softly. feebly.
Fisintly gasper]!-what should she do?

With the bird pressed to her bosom, Swiftly sped she through the storm; Paused not till the stood by mother At the fireside, bright and warm.
Tenderly she warmed and fed it. Till it opened wide its eyes;
Hopping about with its small head turning,
With a look so bright and wise.
"Mana, do you think God sent me?" Softly spoke the little maid,
" Did He tell His bird about me? Is that why it's not afraid?"

The First Christmas Sung. (Sung :o the tune of "Auld Lang Syne")
The twinkling stars shone clear and bright,
Above a little town,
And calmly through the quiet night,
The silver moon looked down.
The little lambs upon the hill
Were sleeping safely there,
While shepherds "seated on the ground"
Watched over them witl care.
Then suddenly the angels came
On tlashing wings of white;
Their happy chorus echoed wide
Across the silent night.
Oh! sweet and clear the angels sang,
The sweetest song we know,
The story of a little Child
Within a manger low.
'Twas long and long and long ago-
Oh! z'ery long ago,
But still we sing the song they sang,
With music soft and low;
For Jesus was the little Chitd
Who in the manger lay,
And Jesus is the chiddren's Friend
Who loves them every day.
-Primary Liducation.

## Shakespeare to His Mirror.

Within thy crystal depths I see I figure semblable of me,
But no more me than 1 am one With the brute rock 1 rest upon;
liur how may brow or cye reveal
The infinities wherewith 1 deal?
Nay, I will break thee, mirror mine! The unseen inward is divine,
The outward body but a bowl
That cover, in the mounting soul.
If any one would truly know What mamer of man ! come and go,
Not thesh alone, but blood and breath,
L.o, Lear, Lord Hamlet and Macbeth?

Poor mummer, 1 must shatter thee.
Since thou dost bear false takes of me! - Richard Burfon, in the Nestember Athantic.

## Mental Mathematics.

## F. H. SPINNEY, OXFORD, N. S. <br> Factoring.

I lave found from experience that greater progress can be made in one hour in teaching factoring by mental drill, than in many hours by other methods.

After multiplication is well learned, send the class to the board, and dictate questions as the following:

$$
(x+3)(x+4)=?
$$

The pupils must write out the products from inspection as fast as the questions are dictated. When the pupils have a column of questions completed, ask them to erase all the terms contained in brackets. For this purpose each pupil should have an eraser in hand, to prevent waste of time. The questions will now stand thus:
$(\quad)(\quad)=x+7 x+12$
$(\quad)(\quad)=x^{2}+8 x+15$
$(\quad)\left(\quad x^{2}-8 x+15\right.$
$=x^{2}-x-42$
$(\quad)(\quad)\left(\quad x^{2}-25\right.$
$=(a+b)-25$

Now ask the pupils to replace all the terms in brackets as they were. There will be too many for them to remember, so they will observe the relation existing between the factors and the products. To make sure that they have observed that relation, tell them that the process just completed is called factoring, and ask them to factor some easy ones similar to those just worked. Such as-

$$
\begin{array}{r}
x^{2}+9 x+20=? \\
x^{2}-9 x+20=? \\
a^{2}-16=? \\
(x+y)^{2}-16=?
\end{array}
$$

This much may not all be accomplished at one lesson. It is better to dwell on the questions involving only the plus sign until that is thoroughly mastered. Each day increase the difficulty of the problems antil the most difficult questions of this nature can be worked mentally by every pupil.

From factoring, I proceed directly to quadratic equations:

$$
\begin{aligned}
& \text { If } a=5 \text { then } a-5=\text { ? } \\
& \text { If } a=6 \text { then } a-6=? \\
& \therefore(a-5)(a-6)=? \quad \therefore a^{2}-11 a+30=\text { ? }
\end{aligned}
$$

Give several more of a similar kind. Ask the pupils to substitute 5 for $a$, then 6 for $a$, in the equations

$$
a^{2}-11 a+30=0
$$

They will find that either will suffice. Then reverse the process, asking them to write down from inspection the values of $x$ in such questions as follows:

$$
\begin{aligned}
& x^{2}-10 x+21=0 \\
& x^{2}-12 x+35=0
\end{aligned}
$$

If there has been sufficient drill on the preceding exercises these will be very readily solved.

Other kinds of quadratics are easily taught as follows:

$$
\begin{array}{r}
a=3 \\
a+7=? \\
(a+7)^{2}=?
\end{array}
$$

When they have many questions on the board such as the following:

$$
\begin{gathered}
a^{2}+14 a+49=100 \\
a^{2}+6 a+9=64
\end{gathered}
$$

Ask them to erase the last terms on the lefthand side of the equation, and subtract that much from the other side. Then the questions will stand thus-

$$
\begin{aligned}
a^{2}+14 a+( & )=51 \\
a^{2}+6 a+( & =55
\end{aligned}
$$

Then ask to have the last terms replaced and the proper amount added to the right side of the equation. Then add more of a similar kind-

$$
\begin{aligned}
& a^{2}+12 a+\text { is a perffet square. } \\
& a^{2}+18 a+? \text { is a perfect square. }
\end{aligned}
$$

Then gradually add others more difficult.
The great advantage of this method is that hundreds of problems can be solved mentally in a few moments: and all under the inspection of the teacher. If any of the pupils are observed copying results obtained by others, allow those to remain at the board after the rest have taken their seats, giving them further drill, so that they will afterwards depend on themselves.

The problems for seat work can be made much more difficult than those solved mentally at the board.

## The Review's Question Box.

R. A. C.-Please give me the name of the secretary of the Comrades Corresponding Branch, as stated in the Review, or any information concerning it, as my pupils wish to correspond with others of the Empire.

The Secretary's name is Mrs. Fetherstonhaugh, Lake Shore Road. Nimico, Ontario, who has full charge in Canada for that part of the work.
M1. G.-Will you kindly recommend the best elementary book on nature lessons?

For an mingraded school, such as you teach, we know of no better book than Brittain's Manual of Nature Lessons: price 50 cents; published by J. \& A. Mcitillan, St. John.

The Enucational Review and Littell's Lieing Age (subscription price $\$ 6.00$ a year), both for \$6.40. The Living Age is a weekly magazine and contains the cream of what is published in the English magazines.

## Practical Problems for Grade VlII.

1. The cost price is $\$ 60$; the marked price $30 \%$ more: the discount $10 \%$. Find selling price and gain \%.
2. The selling price is $\$ 80$, the loss $20 \%$. Find the gain $\%$ if it had sold for $\$_{11} 5$.
3. A house is worth $\$ 4000$; it is insured for $3 / 4$ its value at $11 / 2 \%$. Find preminm paid.
4. An agent sells 600 bbls. of flour at $\$ 4.50$ on $2 \%$ commission. Find proceeds.
5. Find interest on $\$_{3} 60$ from March Ioth, 1901, to October 15 th, 1905 , at $61 / 4 \%$.
6. The interest is $\$ 49.50$, the time + years, the rate $41 / 2 \%$. Find the principal.
7. Find the area and base of a right angled triangle whose length is 75 feet and side 50 feet.
8. Find height of cylinder holding 20 gallons and having a basal radius of to inches.
9. Find area of ring between two circumferences when the radii are 20 inches and 25 inches: respectively.
10. Find area of walls of a room 15 fect long, 12 feet wide and 10 feet high. How much will it cost to plaster walls and ceiling of this room at IOC a square yard?
11. A man three years ago put out at interest at $4 \%$ a certain sum of money; he now has in all $\$ 291.76$. What had he then?
12. Find compound interest on $\$ 300$ for two years at $4 \%$ a year payable haif year!
13. If 3000 liters be bought at 100 a liter, and after paying $40 \%$ duty sell at 7 oc a gallon, fincl gain.
14. A note of $\$ 400$, dated ing. 2;th, 6ii thrie months, was discounterl dance dat at int. IF̈nl proceeds.

Answers.-(1) $\$ 70.20 ; 17 \%$ (2) $15 \%$ (3) \$45. (4) $\$ 2646$. (5) $\$ 103.50$. (6) $\$ 275$. (7) ${ }^{1} 397.5$. (8) 17.65 . (9) 706.86 . (10) $540 \mathrm{sq} . \mathrm{ft} . ;$ $\$ 8.00$. ( 11 ) $\$ 2 \times 0.50$ ( 12 ) $\$ 24.7246$ (13)


At the beginning of the year we had a chimmey corner demid of ornament. A beantiful calendar. brought by one of the pupils, gave us an idea that transformed this bare spot into a thing of beanty for bright eyes to feast on the remainder of the year. We requested all who could to bring a pretty calendar. Alany gladly responded. The best subjects were selected and carefully arranged as to design and coloring; the result was highly gratifying, and our "Calendar Corner" received much praise from visitors.-Popular Educator.

## Let the Sunshine In.

Several Decembers since a little boy in a Boston kindergarten-a child who was accompanied by his nurse every morning-toiled long and patientlv on a Christmas present for his mother. After the holiday had passed the kindergartner asked the children what the recipients had said about the gifts prepared with so much care. It was Robbie's turn to answer. The cliild's lips trembled as he whispered in shame and sorrow, "Mamma didn't want my stamp box, she said I might keep, it myself."

A darling eight-year-old girl asked her father for money with which to buy Christmas gifts. She was tok that she might have money for materials but that it was better for her to make the presents than to buy them outright. "But papa," said the child, "I don't know what to make myself, and mamma won't help, me, she says she can't stop."
There are memories in many of our own hearts of Christmas sadklened and almost lost, because parents failed to see the necessity of troubling to make the blessed day a season of joy. Listen to the worls of the Great Teacher: "Inasmuch as ye have done it unto one of the least of these, ye have done it unto Me."-School Journal.

The lengthening of the one-hour examinations to two hours without materially increasing the length or the difficulty of the examination is a change that will have beneficial results, says the Chicago School Revica, in its notes on the fifth anumal report of the College Entrance Examination l:oard. Judging from the number of failures, the examinations were more difficult this year. The greatest failure was in English $b$, where only onethird the candidates gained a rating of 60 or higher. The results in English history were disappointing. ()nt of 258 candidates in plane and solid geometry only 32 reached the above mark: and so with other branches. Sight translations of Latin and Greek authors will be established for the future.

[^6]
## Teachers' Conventions.

Restigouche County Institute.
The Restigouche County Teachers' Institute met October 19 and 20, in the Campbellton Gramniar School. Thursday morning the Camimeliton schools were in session till II a. m., to give the members of the institute an opportuntt; to obseive the work. The institute then met to organize in the Principal's room, the President, E. W. Lewis, in the chair. The President welcomed the members of the institute and spoke on some phases of educational progress. Dr. Inch, the chief superintendent, who followed, criticized the prevailing fashion of expecting the younger pupis to be able to give all the reasoning for the various 1 rocesses in arithmetic, e. g., why we carry to the next column in addition and why we borrow in subtraction. The teachers' and pupils' time would be much better spent in drilling with numerous examples, and in thus acquiring quickness and accuracy. He also agreed with the president that the reaction against memorizing had gone too far. Memory was one of the most valuable properties of the mind, and the habit of memorizing passages of good literature was an excellent one.

Thursday afternoon was devoted exclusively to manual work. Miss Marjory Mair, teacher of manual training in the Campbellton schools, gave an interesting lesson on paper folding, taking the institute for a class. Prof. Kidner, of the Normal School, complimented Miss Mair highly on the lesson, and gave an instructive address to the teachers, showing how a beginning in manual training could be made with little expense, even in the poorest schools, and urged the teachers to introduce it.
Friday morning, Miss Linda Ultican, of Jacquet River, taught a lesson on transitive and intransitive verbs. Although handicapped by having a young class, who were strangers to her, Miss Ultican skilfully brought out the distinction between the two classes of verbs, and showed how by constant drill along such lines pupils could be made to understand the difference between them.
The rest of the morning session was taken up with criticisms of lessons taught at the institute. The discussions were animated and interesting, and many valuable points were brought out.
A trip to the woods Friday afternoon with a lesson on cone-bearing trees by one of the Campbeiiton teachers, Miss Minnic Colpitts, B. A., late of Guelph Agricultural College, brought to an end one of the most interesting institutes ever held in Restigouche County.

Thursday evening a public meeting was held in the grammar school hall. Addresses were made by Dr. Inch, Prof. Kidner, and Dr. Murray, chairman of the Campbellton School Board.

The following are the officers for the present year: President, E. W. Lewis, B. A., Campbellton; Vice-President, Miss Minnie Colpitts, B. A., Campbellton; Secretary-Treasurer, Miss Dickson,

Tide Head. Additional members of Executive Mrs. L. D. Jones, Dalhousie; Miss McTaggart, Campbellton.

## Gloucester County Institute.

The twenty-fourth meeting of the Gloucester County Teachers' Institute was held at Caraquet, N. B., on the 19th and 20th October. In the absence of the president, Mr. Jerome Boudreau, Inspector J. F. Doucet very successfully conducted the affairs of the institute. A warm address of welcome by Principal Witzell, of Caraquet, was extended to the teachers, over thirty in number, to which Principal Girdwood, of Bathurst, and others replied.

The papers and addresses at the institute were given, as seemed best to the speakers, in English or French, in both of which languages several of the members were equally proficient. The French teachers, however, seemed to have greater facility in expressing themselves in English than the English teachers had in their use of the French language.
A paper on Fractions was read by Miss Emma C. A. Stout, of Bathurst, and was very helpful to teachers of primary grades. A lesson on Canadian history was given to a class of French pupils by Miss Bernadette Cormier. The bright and ready answers won favorable opinions from the audience. Dr. G. U. Hay followed with an address on the teaching of history, pointing out that the surroundings, the imagination, and the resources which children make use of in their play should be brought into requisition in teaching geography and history. An animated discussion followed on the best ways and means of doing this.

Principal Girdwood gave a very clear address on School Management, in which he illustrated practical and common sense methods of dealing with pupils in school. This was followed by an interesting paper by Mr. C. C. Poirier, showing his method of teaching primary geography. Dr. G. U. Hay gave an address illustrating practical methods of nature study. These addresses were very generally discussed, and the following, among others, took part: Inspector Doucet, Messrs. A. J. Witzell, Edw. De Grace, C. C. Poirier, P. Girdwood, Jos. F. Godin, and Misses Lauza Cormier, Loretta Mullins, Josephine Dumas.
,The next institute will be held at Bathurst. The following officers were elected for the ensuing year: P. Girdwood, president; Lauza Cormier, vice-president; A. J. Witzell, secretary; R. D. Hanson, B. A., Josephine Dumas, additional members of the executive.

A very well attended public meeting was held in Mechanics Hall, Caraquet, on the evening of the 19th, at which addresses were given by Mr. P. J. Veniot, M. P. P., of Bathurst, and others. Mr. Veniot took the ground that in the French textbooks which are to be prepared for the children of Acadian primary schools, the language should be simple and adapted to the understanding of
children similar to what is used in primary schools in France, not translations of English text-books, many parts of which had to be translated into French words of two or three syllables. Dr. Hay said that if French primary texts were considered necessary in our schools for Acadian children they should be natural in style and entirely suited to the needs of the children for whom they are to be prepared. After the institute had adjourned, the teachers adopted a resolution asking the board of education to give favorable consideration to the plan of text-book outlined above.

## The Christmas Gift.

Around the Christmas-tree we stood, And watched the children's faces, As they their litule gifts received With childish airs and graces.
We grown folks had our share of fun In making wee ones merry,
And laughed to see the juvenites Kiss 'neath the holly berry,
Beside me sat sweet Bessie Moore. A lovely dark-eyed maiden,
While near her stood our linle Eve, Her arms with love gifts laden,
Until around the roon she went, The blue-eyed baby, shyly,
And blushing red, into each lap Her offerings dropped slyly.
But when to me the darling came All empty-handed was she,
And when I asked, " Why slight me thus?" She answered, "Oh, because we -
She dinna know youl lumming here!" And then with blue eyes shining,
To Bessie's side she went, her arms Her sister's neck emtwining.
"But something I must have," said I,
" My Chtistmas night to gladden."
A shade of thought the baly face Seemed presently to sadden,
Till all at once. with gecful langh-
"Oh! I know what I do, sir!
l've only sister Bessie left, But I'll div her to you, sir!"
Amid the laugh that came from all 1 drew my new gift to me,
While with fushed cheeks her cyes met mine And sent a thrill all through me.
"Oh! blessed little Eve!" cried I:
"Your gift 1 welcome glady!"
The little one looked up at me Half wonderingly, half sadly.
Then to her father straight I turned, And humbly asked his blessing
Upon my Christmas gift, the while My long-stored hopes confessing,
And as his aged hands were raised Above our heads howed lowly,
The blessed time of Christmas ne'er Had seemed to me so holy.

## CURRENT EVENTS

The first section of the British garrison at Halifax has left for Liverpool. The Dominion authorities have not as yet taken over the fortress, but will do so before the close of the year.

In ten years, it is predicted, Canada will outstrip all other contries in the production of iron ore, as well as in wheat raising. This prediction is made by a French expert in metallurgy, who has been visiting Canada to report upon the electrical method of smelting ores.

The borly of Sir George Williams, founder of the Young Men's Christian Association, who died November 6, was turied beneath the dome of St. Paul's Cathedral, in the presence of nearly a thonsand Pritish and foreign delegates of the association.

An enthusiastic reception was given to the Prince and Princess of Wales at Bombay, where they arrived on the King's birthday.

A number of Boers who went to other parts of the world at the close of the war in South Africa are now returning to live under British rule. The United States colony was not a success, the South American colony was also a failure, and those who went across the dividing line into German African territory are glad to return to their old homes to escape from the hardships of German rule, and the dangers of the native insurrection in German Southwest Africa.

A very charming and amiable person is the Dowager Empress of China, according to a writer in the Century Magazine, who has had access to her court for the purpose of painting her portrait. There is mo doubt that the fearful tales we have been told of her and her cruclties are much exaggerated, if not entirely without foundation.

By a wote of alout four to one, the people of Norwar have decided upon a kingdom instead of a republic as their future forn of government: and by a unamimous vote the storthing las chosen Prince Clarles of Denmark as King of Norway. He has accepted the prsition, and will admpt the name of Haakon VII. First united with Sweden, he the marriage of a Norwegian princess to a Swedish king, later in union with Dentmark, and again with Sweden, it has been nearly seven humdred years since Norway has had a king of its nwn who was not also ruler of one of the other Scandinavian kingdoms. The union with Denmark, which lasted from r397 to 18 r 4 . was more intimate than that with Sweden, which has just been dissolved by one of the most peaceful remolntions in history ; but the Norwegians always ennsidered themselves a separate people. Dr. Fridtinf Nansen, the famons Aretic explorer. comes as the first Norwecgian minister to Great Pritain: and a daughter of King Edward VII., as wife of Prince Carl, beenmes Queerl of Norway.

Finland, where Swedish is the official language, may be called the fourth Scandinavian land, in view of the fact that it was long under Swedish rule, though in race and language the Finns are a separate people. In Finland, too, a revolution has taken place, the Emperor of Russia as Grand Duke of Finland, granting to Finland responsible government, and a parliament elected by universal suffrage. This, also, was a bloodless revolution.

The flag of Sweden, heretofore of very dark blue with a yellow cross extending through it and the symbol of the union with Norway in the staffhead corner, now flies without the union mark. In its new form it was raised for the first time on all school houses and public buildings on the first day of November, and hailed as the new ensign of Sweden.

Practically all the powers have accepted the invitation of the Emperor of Russia to be represented at the second peace conference, which will probably assemble in May next.

Mrs. Hubbard, who following up the work in which her husband perished, has been exploring the interior of Labrador, found no great difficulties in crossing from Northwest River to the Hudson Bay Company's post at George River, a distance of more than five hundred miles. The other Labrador expedition, under Dillon Wallace, has also been heard from, and is probably by this time safe at Ungava.

Prince Nicholas of Montenegro, following the example of the Russian Emperor, has announced that he will give his people representative government, and the elections for a popular assembly were to take place November 27.

A society for the protection of Canadian beauty spots from disfigurement by advertising signs has been organized in Ontario. Local improvement work will be taken up in addition to the abatement of the advertising sign nuisance. It is intended to organize branches of the league in all the important cities and towns of Canada.

Korea, as an independent country, has ceased to exist, the Korean authorities having formally accepted a Japanese protectorate. The acceptance was, perlaps, only nominally a matter of choice: for the occupation of the country by Japan was a military necessity. A new railway, which opens 11p the centre of Korea to trade, has been built since the Japanese came; but has hardly reconciled the Koreans to the presence of the Japanese soldiers that garrison the chief towns along its route.

One hundred and twenty-cight new stations are named on the latest edition of the Canadian Pacific Railway map. The map is revised quarterly, and this may be taken as an index to the growth of their business within the preceding three months.

The now cave recently disonvered in Kentucky promises to equal or surpass in interest the famous Mammoth Cave. One arm of it has been explored for a distance of seven miles.

Buenos Ayres, the capital of the Argentine Republic, still continues its rapid growth, and has now over a million inhabitants.
The governor of German Africa has made his first official visit to Lake Victoria Nyanza, the southern shores of which are German territory. Travelling only in the day time, he reached the lake from the Indian Ocean by railway in two days. Thirty years ago it took Stanley months to make the same journey with native porters to carry his baggage through the jungle. Stanley made his way around the lake with small boats rowed by his men. The German governor had a steamer at his disposal. While the former required more than nine months to reach Uganda, the latter, following nearly the same route, had reached that place, now the capital of a British colony, and returned to his own capital on the Indian Ocean in just three weeks' time.
The British government has raised the grade of its representative at the Japanese court from that of minister to that of ambassador, thus recognizing Japan's position as a first-class nation.
The Chinese government has sent out able statesmen as commissioners to travel through the principal countries of the world and observe the workings of their several forms of government, with the object of drafting a constitution for the empire that shall embrace the best features of those of the Western World.
The British government is about to establish a new port on the shores of the Red Sea, to be known as Port Soudan. It will take the place of the port of Suakin, which is to be abandoned. Besides being an important coaling station, it will serve as an outlet for the cotton of the Soudan, where cotton is now an important industry.

A fleet of Austrian, British, French and Italian vessels, under command of the Austrian admiral, has been ordered to Turkish waters to enforce the demands of the allied powers for reforms in Macedonia.
There is a crisis in Hungarian affairs. Austria and Hungary are united, as Sweden and Norway recently were, by having one crowned head over the dual monarchy, while in other respects the two countries are more or less independent of each other. Hungary, however, is, as Norway was, jealous of the weightier influence of the sister state in the common affairs of the two nations. Perhaps it is more correct to say that the Hungarians, or Magyars, are jealous; for they number less than half the population of Hungary: The others are made up of Germans, Roumanians, Croats. Serbs and Slovaks; none of whom, with the possible exception of the Croats, are in very strong sympathy with the Magyars. But, under the present suffrage, the Magyars have full control of the Hungarian parliament, their representatives outnumbering all the others about ten to one. The Emperor of Austria, as King of Hun-

# School of Science for Atlantic Provinces of Canada. <br> 20th SESSION, JULY 3rd to 20th, 1906. <br> AT NORTH SYDNEY, <br> CAPE BRETON. 

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gary, has refused the demands of the Hungarian leaders, chief of which are a separate tariff for Hungary and the use of the Hungarian language in the army. To settle the matter, the EmperorKing may dissolve the present parliament and call a new popular assembly to be elected by universal suffrage, thus putting his Mlagyar subjects in the minority and depriving them of their power.

Serious disorders continue in many parts of Russia. The most threatening of these are in Poland, where the people have never forgotten their history, and still seem to hope for independence. Autonomy, with a viceroy and a representative assembly they might obtain; though, according to Russian ideas, they have not the same right to it as the Finns. By official title, the Emperor Nicholas is Emperor of All the Russias and Czar of Poland; but repeated insurrections led to the abolition of the Polish constitution and the complete mion of the ancient kingtom with the Russian Empire. Poland is now under martial law, and is specially excluded by the Czar's proclamation from participation in the new liberties granted to his other subjects.

The statement of last month to the effect that irrigation had not made any marked difference in climate, as might be understood from the csmiext, though not very clearly expressed, referren to the climate of Egypt. It is a satisfaction to learn that the great increase in the area of land muder cultivation has been obtained without injury to the monmments of the ancient civilization, the preservation of which has been clue to the drynes $\mathrm{p}^{2}$ the almosphere. The Exyptian monolith hrose to New York some years ago con: began to cor: ble in the mositer climate oi the Nowh Nam: coast.

## SCHOOL AND COLLEGE.

A concert and cocial was held in the schoolhouse, Perry district, Sussex, N. 13. A good sum was realized, which will $\mathrm{g}^{\circ}$ towards schonl purposes. A grnat effort was made by the teacher, Miss Agnes E. Reymolds, and peonle to make it a success.

Professor Lishman, to whom has been given the task of establishing a new mining school at Glace Bay. is an atts gracluate of Durham University, and has had much practical experience in coal mining.-Kings College Record.

Mr. O-burn N. Brown, of Newcastle, N. B., Harkins Academy, intends to take a course at Fredericton after the holidays to qualify as a teacher of manual training.

Miss Tda A Northrup, of Kingston. N." B., has begun a two years' course in domestic science at the Macdonald 1lall, Guelph, Ont.
l'rofessor Arup has entered on his duties in the chair of chemistry as successor to Dr. Kennedy, of Kings College, Wind-or, and the Rev. C. A. Brodie Brockwell, B. A., is the first to fill the New Alexandra professorship of divinity in the same college. Both are men of scholarship, and their attainments will no doubt add much to the prestige of Kings.

It in proposed at the next session of the New Brunswick legislature to amend the school law so that in the refusal of a district to consolidate with others. the board of education shall have the right to affect such a change without the votes of the ratepayers. It is also proposed to have the law relating to vaccination of school pupils changed so as to throw the responsibility on trustees and parents rather than on the teacher,
The scond forward movement for Acadia College is now approaching successful completion. Of the amount to be raised. $\$ 100.000$, the sum of $\$ 02.000$ has already heen collected or pledged, and Dr. Trotter confidently looks forwatd to seeing the total amount secured at an early date. This will bring an equal sum from John D. Rock :feller. which will place the institutions at Wolfville on a firm financial basis.
In the Dominion Fair recently held at New Westminster. British Columbia, the schonls of that province gave a fine exhibition of their work, which attracted universal attention and many warm commendatimes.
The Halifax school board has adopted a new scale of salaries for teachers, which during the next three years will add from $\$ 5,000$ to $\$ 6,000$, or an increase of sevens per cent over present salarice. The proposed plan af increase will treat all teachers fairly. but necessarily the largest inctease will be to those of approved experience and scholarship

## 34. New Books

## The History of Canada.

By G. U. Hay, D.Se.
To which has been added a sketch of the History of Prince Edward lsland.
By Helen M. Anderson.

## Entrance Grammar Notes.

By Chas. G. Fraser, Principal Crawford Street School, Toronto. For Third and Fourth Classes. Price I5cts.
Fntrance Gransmar Notes is an ideat little text-book of English Granimar. presenting, in convenient form and striking type, the essentials of the science of language which an entrance pupil should know as a preparation for defnite work in composition.

The order is logical. It begins with the sentence-the unit of a language - and then dcals with the parts of which a sentence is composed, before taking up the classification and inflection of the different parts of speech.

## Introdnctory Physiology and Hygione for Public Schools.

By A. P. Knight, M.A., M.D., Professor of Physiology, Queen's University.
This book consists of a series of graded lessons, most of which were taught to pupils of the Kingston Public Schools during the autumn of 1904. They were taught in presence of the teachers-in-training of the Kingston Model school, and as such were intended to be model lessons

1'rice 60cts.

## The Nature Study Course.

With suggestions for teaching it.
By J. Dearness, M.A., Vice-Principal London Normat School. Based on Lectures given at Teachers' Institutes, Sunmer Schools, and at the London Normal School. Price 60cts.
Practical and Theoretical Geometry - Part I.
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13y A. H. McDougal, B. A., Prineipal Ottawa Collegiate Institute. Price 50 cts .

## Introductory Chemistry.

For High School and Continnation Classes.
By W S. Eltis, B. A , B.Sc., Principal Collegiate Institute,Kingston Priee 30cts.

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Miss Ida McLeod, daughter of Rev. Dr. McLeod, of Fredericton, is to be married this month to Mr. Maurice White, superintendent of schools for the Western Transvaal. Miss McLeod is a very estimable young lady whose large circle of friends join in wishing her a great measure of happiness and prosperity.
Mr. David Wilson, B. A., recently inspector of schools in the Kootenay district, British Columbia, has now charge of the schools on Vancouver Island, with headquarters at the capital city, Victoria. Mr. Wilson is well known in the East. He is a graduate in arts of the University of New Brunswick, and for the last twenty years has occupied a leading position in the educational affairs of British Columbia.

The number of new students entering Dalhousie this fall is 122. These are distributed as follows: 96 in arts and in pure and applicd science: 11 in medicine and 15 in law. While the total number of new students may have been equalled in former years, the number of new students in arts and science this year is the largest in the history of the college. Twenty-five of them have entered the courses in engineering. The homes of the new students are thus located: Halifax city and county, 47; the island of Cape Breton. 17; Pictou County, 14; Colchester County, If; New Brunswick, 9; Lunenburg County, 7 ; two outside the Maritime Provinces and the remainder i. Prince Edward Island and the Counties of Shelburne, rarmouth, Amapolis, Kings, llants, Cumberland and intigonish

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Comprehensive Bookreeping-A First Book. By Artemas M. Boyle, A. M., High School. Kansas City. Cloth. Pages 1.42. Price go cents. The Macmilian Company, New York; Macmillan \& Company, London; Morang \& Company, Toronto.
This book arouses the attention at once by its clear pages and beautifully executed script models. Its methods are up-to-date, designing to lay a good foundation in preliminary work for business practice.

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scries. The material has been carefully selected, the words and poetry being of the higher order, and the songs are well adapted for all public occasions in which school music is used.
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Designed to guide pupils in their field work and to furnish definite outlines for the exercises in the laboratory, this manual provides a basis for the text-book work. It is planned to occupy the same place in the study of physical geography that the laboratory manual holds in the study of physics or chemistry.
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A very pretty story; and if it does not arouse the same intercst as the author's carlier work, it lias a charm of its own whicls will abide with the reader.
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These are more or less didactic. Minglted with the descriptions and pleasant ancedotes for children, we find many curious illustrations of the lives and curious habits of many of the finny tribe.
Easy Mathematics. Vol. I., chiehly arithmetic. By Sir Oliver Lodge, F. R. S., Principal of the University of Birmingham. Clotls. Yages 436. Price 4s. 6d. Macmiltan \& Company, London.
The well known reputation of the author of this book is a guarantee that we lave here something worth reading and pondering over. It is "a collection of hints to teachers, parents, self-taught students and adults," presenting "a summary or indication of most things in elementary
mathematics useful to be known." Whether it is a problem in pedagogy or cube root, the author is equally clear and direct: "Teaching which is not fresh and lively is harmful;" "Wearisome over-practice and iteration and needlessly long sums should be avoided;" "Even influential persons occasionally speak of mathematics as 'that study which knows nothing of observation, nothing of induction, nothing of experiment,-a ghastly but prevalent error which has ruined more teaching than perhaps any other misconception of that kind." The book is brimful of clearly expressed thought and tangible suggestions.
The Poetry of Life. By Bliss Carman. Cloth. Pages 258. The Copp Clark Co., Toronto.

This is a beautifully bound volume, appropriate to the Christmas season, made up of sixteen prose essays of Mr. Carman. The subject of the greater number of these is poetry-The Poetry of Life, The Purpose of Poetry, How to Judge Poetry, The Defence of Poetry, The Permanence of Poetry, The Poet in Modern Life, The Poet in the Commonwealth, etc. Written in Mr. Carman's vigorous and healthy English, they furnish a choice collection of the best specimens of his prose writings.

## Recent Magazines.

The Atlantic Monthly for November is a notable number both in the importance and interest of its papers. Among these are several dealing with prominent subjects in literature and topics now engaging the attention of the public. Other attractive features are short stories and poems, a charming essay upon The Country in November, by Henry Child's Merwin and Reverend Mother's Feast, the concluding instalment in Agnes Repplier's series of engaging sketches of a girl's life in a convent school. The Atlantic is the literary magazine of America, and is every month increasingly interesting in the variety and excellence of its contents. The Atlantic for December is a notable Christmas number. There are seasonable articles, fine stories, and distinctively Christmas poems.

The November Canadian Magazine is largely a sportsman's number. There are sporting sketches and illustrations, stories of animals by Chas. G. D. Roberts and W. A. Fraser, and a history of Golf in Canada. The article on the New High School, by W. L. Richardson, should wake up Canadian schoolmen to the importance of mantal training. The excellence of the articles and illustrations and the superior make-up of this number show that the Canadian is successfully meeting the wants of its readers. The Christmas number of the Calladian Magazine is quite worthy of the season. The contents show a great variety, ranging from articles on art and special book reviews to stories and interesting comment on the passing phases of our existence.

For colorwork, presswork and general beatty and usefulness, the December Delineator is conspicuous among the Christmas magazines. Eight paintings by J. C. Leyendecker, illustrating and interpreting the Twenty-flird Psalm, is the most extensive color feature of the number. The short fiction of the number comprises stories by Hamlin Garlanct, John Luther Long, Sir Gilbert Parker. and there are many attractive articles on topics of interest.

The pastimes for children are filled with the spirit of the season, and there is an abundance of matter of housewifely inter:st.
Littell's Living Age occupies a field peculiarly its own. It gives sixty-four pages every Saturday of selections from the best and most popular English periodicals, and is almost indispensable to any one who wishes to keep informed upon public affairs and current discussion. Fiction, essays, travel sketches, poetry, critical and biographical papers, literary and art articles, and much else besides will be found in the magazine. The subscription price is six dollars a year, but a trial subscription of three months, thirtecn numbers, may be had for one dollar. The Living Age Company, 6 Beacon Street, Boston, Mass.

Early, while I'm still asleep,
The sun arranges things for me;
It takes the chill all off the air,
And lights the day so I can see.
It beams upon me all day long,
And when at last it sinks away,
It hustles round the other side,
To be in time for me next day.
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| Publishad Monthly. ST. JOHN, N. B, JANUARY, 1906. |
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THE F゙DC'CATIONAL REVIEW, Sr. John. N. H.

Our best wishes to the readers of the Review for A Happy and Prosperous New Year.

Amherst, N. S., has placed itself in the front by increasing the salaries of its women teachers. The Review has been able to record instances of salaries increased for several months past. What cities, towns and country districts will be heard from next?

Ir is conceded that the very best people should be secured for the work of teaching. Their services cannot be retained at unremtnerative salaries. Although salary may be a secondary consideration with many teachers, it is nevertheless a measure of apreciation on the part of those who give it.

The N. B. Educational Institute will meet at Chatham in June.

During the month of December the Syelney C. B. Post began an evening paper as an addition to the large and flonrishing morning edition which it lias been publishing. The Post has shown a marked improvement of late, and is a vigorous example of the growth of an enterprising and progressive commenity.

This montil we present our readers with a picture and antograph epitaph of Benjanin Franklin instead of the ustual general art picture, which will appear in the February mmber. There are many incidents in the early struggles of the life of this eminent philosopher which will stimulate the average boy.

Reflect on the opening of the new year whether you gained more by your successes or by your failures last year.

The Review would like to hear more about the schools. One teacher is doing something different from others,-a way of presenting a lesson that has secured attention, interest and good results; a device that has becn successful in promoting good order and punctuality; another that has improved the deportment of the school. Let us have these for publication that hundreds of others may share in the benefits. Send them on or before the fifteenth of each month.

Tine personality of a teacher is what wise employers wish to secure above all else and it is largely capable of cultivation. In the first place a teacher shotild have grod food, avoid worry and anxiety, and have a comfortable room in which to be quiet. In the long rum these are half the battle. To keep up a strong personality the teacher must not waste nervons energy. He must say no to social and other calls gond in themselves, but which would waste his energies if he tried to attend to them all. The problem is what to select and what to leave out of the many demands on his time and abilities. Teachers shonld study what is best for themselves and their pupils, do what is best, and then never mind what people say.

## The Old and the New.

How often do we hear it stated, "The schools of today are not what they were when we were young, especially in the three R's-reading, writing and arithmetic." The men who talk that way know nothing whatever by experience of the interior working of our schools. They are busy menmechanics, merchants, professional men. They compare their own well-earned acquirements with the acquirements of children leaving the schools, forgetting the education of the years of experience that have elapsed since they left school.

An interesting comparison of the schools of sixty years ago with our own has recently been made by Principal Riley of Springfield, Mass., who discovered lately in that city a bound volume containing the questions and answers of an examination test given in 1846 to 250 pupils of grade nine of the high school.

The tests in spelling and arithmetic which were given to 250 ninth grade pupils during the last year by Principal Riley on the questions used in 1846 showed 51 per cent of correct spelling, as compared with 4 I .per cent for 85 pupils of the high school in 1846 , and 65 per cent as compared with 29 per cent in arithmetic. The comparison in geography is equally unfavorable to the old schools.

The average age at which pupils entered the high school was as high as it is today. This gives evidence that the schools half a century ago were weak in the pet subjects on which they spent their strength.

We give below the spelling and arithmetic tests so that our teachers may institute a comparison if they choose with their own schools.

Spelling.-Accidental, accessible, baptism, chirography, characteristic, deceitfully, descendant, eccentric, evanescent, fierceness, feignedly, ghastliness, gnawed, heiress, hysterics, imbecility, inconceivable, inconvenience, inefficient, irresistible.- 20 words.

Arithmetic.-I. Add together the following numbers: Three thousand and nine, twenty-nine, one, three hundred and one, sixty-one, sixteen, seven hundred, two, nine thousand, mineteen and a half, one and a half.
2. Multiply 10008 by 8009 .
3. In a town five miles wide and six miles long, how many acres?
4. How many steps of two and half feet each will a person take in walking one mile?
5. What is one-third of $175 \frac{1}{2}$ ?
6. A boy bought three dozen of oranges for $371 / 2$ cents and sold them for $11 / 2$ cents apiece; what would he have gained if he had sold them for $2^{1 / 2}$ cents apiece?
7. There is a certain number, one-third of which exceeds one-fourth of it by two; what is the number?
8. What is the simple interest of \$I200 for 12 years, II months, and 29 days?

## History of the River St. John

A series of articles, published in the Saturday edition of the St. John Daily Telegraph for the past year or more, by Rev. W. O. Raymond, LL. D., has just been issued in book form. The result is a volume of 376 pages, largely documentary in character, but a mine of historic information on the St. John River valley from the time of its discovery by Champlain in 1604 to the coming of the Loyalists in 1784. The book is illustrated by several full page portraits and engravings, with plans, maps, fac-similies of signatures, etc. Dr. Raymond in his numerous citations has quoted the exact language of the writers, giving us a series of glimpses of the past as they appeared to the eyes of the principal actors of Acadian story-de Monts and Champlain, Biard, Biencourt, La Tour, Charnisay, the Sieur de Soulanges, Governor Villebon, Membertou the Micmac, and Secoudon the Maliseet. The Indians and their mode of life is accurately described and we are enabled to see them as ther appeared to the eyes of the first explorers of the Acadian wilderness. Next we have the tragic tales of Indian wars and massacres, the touching story of John Gyles the little English captive, the record of the feeble attempts of the French at colonization, the narrative of the struggle for mastery of the rich river valley between the French and the English, all woven together with the skill and patience of a historian and the love of one passionately devoted to his story.

Dr. Raymond las won the gratitude of the students of our history in laying before them in this acceptable form the narrative of early French exploration in this country. The book is a mine of information to present and future readers. Especially valuable is it to teachers in supplementing the somewhat meagre records in the text-books of our early history. Teachers may obtain the book from Dr. Raymond for one dollar.

## Nature-Study.

## Hints for January Talks.

For the younger grades a series of talks illustrated by pictures of birds and other animals will prove interesting and beget in the children an appreciation of animal life,-how animals prepare for winter, where the birds have gone, which remain for us for the winter, such as the English sparrow, chickadees, nuthatch, pine grosbeak, etc. What do they find to eat, what are the different things you have seen them doing? How are they protected from the cold?

The winter is a good season for studying the common domestic animals, such as the cat, dog. horse, cow and others. The cat belongs to a large family, the members of which can only be illustrated by pictures-the wild cat, lynx, tiger, panther and others, but they have the same characteristic as the domestic cat.: They are flesh-eating: they approach their prey stealthily and spring quickly upon it ; they have sharp claws which can be drawn into and out of sheaths; they have soft cushions on the bottom of their paws which enable them to tread noiselessly, they lave sharp teeth for cutting and biting their prey; they have long sentsitive whiskers which help them to feel their way in the dark; their cool moist noses help them to scent keenly; their erect ears emable them to hear the slightest noise.

Pictures will help to distinguish the various breeds of dogs and their relatives the fox and the wolf. Has the dog claws that can be drawn intn sheaths? Does he spring on his prey like the cat? Does he hunt at night? Has he the same quick scent and hearing? Is his tongue rough like that of the cat? Name some of the conmon breeds of dogs. Illustrate their faithfulness and other traits hy stories-of Eskimo dogs, St. Pernard, shepherd, Newfoundland, and others.

How do grass-eating animals get their food? How do their teeth differ from those of the cat and dog? Their fect? What animal feeds on either flesh or vegetables? (The bear). What is chewing the cud? Name some animals that are relatives of the cow and horse. (The sheep, goat, deer, monse, etc.)

Get the children to tell you what they can about their home animals; their tameness, uses, fitness for their surroundings, and to give stories about them.

Get the children to tell you what they can about the air, the winds and their direction, water, ice. Continue the weather records for this month. Keep up the observations on the stars and their movements in the sky. What is the planet Jupiter's position compared with that when you began to observe it in November or December?

Did you notice the two stars quite close to each other, like a pair of bright eyes, in the early hours of Christmas Eve in the south-west sky? These were the planets Saturn and Mars in conjunction, the latter a little the brighter, and reddish. They set about nine o'clock on the first of the new year. They both shine by the reflected light of the sun. Why is it then that Saturn, which according to its larger area should be about fifteen times as bright as Mars is not quite so bright? Watch these planets in the early evening sky as they draw apart during the month.

The magnificent group of constellations which adorns the winter sky is now fairly visible in the east and south-east. Orion, the finest of them all, is also the best one to use as a pointer to help us to find the others. At $8.300^{\circ}$ clock in the evening about the first of January, it is almost due southcast, and about one-third of the way from the horizon to the zenith. Its two brightest stars, Betelgeuse and Rigel, lie to the left and right of the line of three which form Orion's belt. Two others, not quite so bright, Bellatrix and Saiph, complete a quadrilateral which incloses the belt and also the smaller gromp on the right. known as the sword. The midtle one of these last three stars is perhaps the most remarkable object in the heavens. A fieldglass will show it double, and a small telescope resolves the brighter of the three stars seen with the field-glass into four components, to which a powerful instrument adds two more.

The line of Orion's belt points downward to Sirius. which even at its present low altitude is easily the brightest star in the sky, and upward to Addenaran, and beyond it to Jupiter, near which to the northward are the Pleiades.

The very bright star in the Milky Way, north of Aldebaran, is Capella, in the constellation Auriga. Pelow this is Cemini, marked by the twin stars

Castor and Pollux, from each of which a line of finer stars runs toward Orion. Below these again is Canis Minor, with the bright star Procyon.

The great square of Pegasus is well up in the west. Aquarius is below it. Cygnus is low in the northwest, and Lyra is still lower, Vega being near setting. Cepheus, Cassiopeia, and Persens lie in the Milky Way between Cygnus and Auriga, and Andromeda and Aries are south of them, almost overhead. Ursa Major, Ursa Minor, and Draco lie below the Pole, and so are not conspicuons.

## January Birthdays.

January 1, 1728. Edmund Burke born in Dublin; orator, statesman, philanthropist; as M. P. he recommended measures which, had they been adopted, would have averted the Revolutionary War in America; his essay on the "Sublime and Beautiful" is an English classic.
January 3, ro6 B. C. Marcus Tullius Cicero, a great orator and writer and an illustrious Roman; rose from a humble station to the highest office in the Roman Republic. Catiline conspired to kill him and others and burn Rome, but Cicero drove him from the city by his eloquence. Of literary labors he says: "They nourish our youth and delight our old age. They adorn our prosperity and give a refuge and solace to our troubles."
January 6, i8ir. Charles Sumner, born in Boston; a great orator; opposed to slavery.

January 15, 1726. General James Wolfe, born in Kent county, England; was distinguished in the army when but twenty years old; his success at Louisburg placed him at the head of the army; at twenty-three years of age he took Quebec, dying from wounds in the moment of victory.

January 17, 1706. Benjamin Franklin born in Boston, of English parents (see sketch, p. 190.)

January 18, 1782 . Daniel Webster born in New Hampshire; great statesman and orator.
January 19, 1807. General Robert E. Lee: chief Confederate general in the United States Civil War.
January 22, 1561. Francis Bacon born in London; one of the greatest philosophers of modern times; a great orator, statesman and author; his essays are literary masterpieces. When sixteen he wrote: "They learn nothing at the universities but to believe; they are like a becalmed ship, they never move but by the wind of other men's breath."

January 24, 1712. Frederick the Great, King of Prussia; was brought up and educated with great severity, and made to endure many hardships as a
lad; was a great warrior; was involved in the Seven Years' War with but one ally-England; had varied successes and ill-fortune.
January 25, 1759. Robert Burns the national poet of Scotland, born near Ayr; his father a poor farmer; suffered many hardships in early life, and was intemperate in his later years; died at the early age of thirty-seven. His most famous poems are: "Tam O'Shanter," "Cotter's Saturday Night," "To a Mountain Daisy." Scott, then a very young man, met the poet at Edinburg, and has left a very interesting account of his appearance.

January 31, 1574(?) Ben Jonson, great poet and dramatist, born at Westminster; wrote "Every Man in His Humour," "The Alchemist," and many other plays. His tombstone in Westminster Abbey bears the inscription, "O rare Ben Jonson P"
[These birthdays may be made the occasions of recitations from the authors' works, and these and other additional notes expanded into short compositions.]

## Our Native Trees.

BY G. U. HAY.

## The Pines.

'This is the forest primeval. The murmuring pines and the hemlocks,
Bearded with moss and with garments green, indistinct in the twilight,
Stand like Druids of eld, with voices sad and prophetic, Stand like harpers hoar with beards that rest on their bosoms."
Those who have camped out in a pine forest will recognize the appropriateness of the poet's word "murmuring." But not so with the rest of the description. One seldom sees a living pine tree covered with the "old man's beard," which the poet in his license describes as a "moss." Rather commend us to the description of Lowell, who says:

> "Spite of winter, thou keepest thy green glory, Lusty father of Titans past number! The snowflakes alone make thee hoary, Nestling close to thy brarches in slumber, And "hee mantling with silence."

The white pine is here meant, the monarch, the loftiest and largest of girth of all our eastern Canadian trees. Most of these "Titans past number" have fallen by the axe of the lumberman, and the younger and smaller trees only remain, except in the depths of a remote forest where the ground is covered with the accumnlated leaf mould of centuries. The white pine (Pinus Strobus) takes its
name from the color of its wood, which is light, nearly white, soft, compact, and one of the most valuable of timbers. A cubic foot weigls twentyfour pounds. It has probably been put to more uses than any other tree in America. In the early years after these provinces were discovered, the pine trees were cut and taken across the Atlantic to make masts and spars for Old World navies. Its timber has been carried over to the Old Country for inside house finishings. For, building purposes it is unexcelled, as it is easily worked and stands the weather. For furniture and cabinet work it takes a fine polish, and is esteemed for its durability and beauty.

The pines may be toid from the other evergreens by having their leaves in a sheath at the base. In the white pine there are five very slender, pale green leaves, from three to five inches long. The pines, like the spruce and fir, produce their seeds in cones, but the pine cones require two years to mature. The pollen-bearing and seed-bearing clusters are found on the same tree, hence they are monoecious plants. The pollen is scattered in May, borne far and wide by the winds. Most of the seed-bearing cones are developed on the upper branches, and the nut-like seeds, two being borne at the base inside of each bract or scale, are ripe in the second autumn. The empty cones, with open bracts, cling to the tree for some time, or soon fall. The white pine cones are large-from four to six inches long, and one inch thick when the bracts are closed.
The leaves of all evergreens fall off after two or more years. Those of the white pine stay on the trees three or four years.

The red pine (Pinus resinosa) has rather smooth, reddish bark, flaky when old, with two leaves in each sheath. Its wood is compact, light red, and rather heavier than that of the white pine,-a cubic foot weighing thirty pounds. It is used for bridge and building timber. It is not resinous as its Latin name seems to imply. Its cones are much smaller than those of the white pine. This tree is much less common than the white pine in these provinces. The red pine is a beautiful shade tree, its tall, straight trunk and heavy clusters of foliage make it easily distinguished from other pines and evergreens.

The Jack, or Labrador pine (l'inus divaricata), is the smallest of our pines, with spreading branches; leaves two in a cluster like the red pine. but short, an inch, or an inch and a half, in length, with numerous small cones, curved upwards. The wood is weak, light red, and a cubic foot weighs
twenty-seven pounds. Its chief use is for railway ties. It covers large areas in light sandy soil from the Atlantic to the Pacific, and extends far north.
It is a good exercise to learn to distinguish the pines, not only by their needle-like leaves, but also at a distance, by their form, and by their clusters of foliage.

## The Distinctive Features of Acadia.

Professor L. W. Batley, LL.D.

Every separate region of the earth's surface has its peculiar features which are not exactly repeated in any other, and connected with these features are the equally distinctive characteristics of the proples who inhabit then, their history, their language, their occupations and their development. A journey across the American continent by either of the great trans-continental lines of travel would, to a stranger, suggest these contrasts in a most forcible way. Near the sea coast the influence of the ocean tends to determine maritime pursuits, to fix the termini of the great arteries of commerce, to determine peculiarities of climate and productions, unlike in many features to those of the interior, to give to these again, as the parts first discovered and settled, a more lengthy history, and generally a more advanced degree of culture and refinement than are to be found elsewhere. The prairic region suggests an ocean, but it is an ocean of waving grain, where agriculture is the predominating factor in the life and development of its possessors. In the mountain region, on the other hand, agriculture is impossible, and among lofty hills, narrow defiles, swift torrents and possibly glaciers, profit is sought below rather than upon the surface, and mining is the controlling factor, the source of wealth and growth. There the scenery, the soil, the forest, the rivers and the lakes of any one tract are wholly tunlike those of any other, and give it a character not to be mistaken.

Acadia (originally termed Arcadia) is one of the natural divisions of America, distinct in its situation, its physical features, its climate, its human and its geological history; and with these features and their relations every inhabitant of the country nught to be, in some degree at least, familiar. Let me enumerate those which are most obvious, leaving for later consideration the cletails of each and the catlses to which they are to be ascribed.

Our Situation.-The region to which the name Acadia is here applied embraces the so called maritime provinces, New Brunswick, Nova Scotia and Prince Edward Island. If Newfoundland be added, they represent that portion of the continent attaining the most easterly meridian, and therefore approaching most nearly to Europe. This fact alone is of the utmost significance, because it gives us the shortest line of ferriage to that continent, as it was also, probably, the first portion of America to be reached by Europeans. The latter fact helped to give prominence to its early history; the former is now becoming of increasing importance in connection with the construction of the great trans-continental lines of travel and the shortening of inter-communication between the west and the east. It is this which gives prominence to the port of Halifax ; it may in time give even greater importance to the still more easterly port of Sydney.

Acadia is also situated in a comparatively northern latitude. This is an important factor in its climate, but that it is not the only one is indicated by the fact that the parallel of latitude which passes through southern New Brunswick and Nova Scotia is also that which passes through the sunny climes of southern France. We need not just now consider the cause of the contrasts between the two-the one characterized by the length and severity of its winters, the other constituting a region to which, in the winter season, flock so many thousands of those who would seek mild and equable climatic conditions-but, in passing, may note the fact that while our winters are m11doubtedly long and cold, they are also very: invigorating, while the delightful stmmer climate is each year attracting in ever increasing numbers those who would escape the heated cities of the States farther south.

The two great factors referred to, our northerly and casterly position, bring us into such relations with the great occanic currents that our coastal waters remain cool throughout the ycar, and thus help to make our fisheries the finest in the world.

If now, with the aid of an atlas, we consider the relations of the Provinces enumerated above to each other, we find them, except P. E. Island, distributed around the sides of the Gulf of St. Lawrence, and, in a general way, sloping towards the latter. Then, with the ciulf of St. Lawrence they constitute one of the great depressions of the continent, a depression which may be termed the

Acadian Basin, comparable with the great Mississippi basin, and though much of this is now submerged, the submergence is only to very shallow depths, while in Prince Edward and some other islands the bottom rises to the surface. Moreover, while New Brunswick constitutes a portion of the mainland, Nova Scotia is almost, and Prince Edward Island and Cape Breton are wholly, surrounded with water,, so that the one may be conveniently termed Continental Acadia and the others Insular Acadia. We shall hereafter see that these relations, too, are not without most important consequences.

Tife Configuration of Acadia.-The Province of New Brunswick, or Continental Acadia, lying in a general way betwcen the meridians of $64^{\circ}$ and $67^{\circ}$ west longitude and the parallels of $45^{\circ}$ and $48^{\circ}$ north latitude, has the general form of a parallelogran, the longest diagonal, which is also the shortest direct line of railway from the Province of Quebec to the boundary of Nova Scotia, being 246 miles. The total area has been computed as embracing $17,677,360$ acres, or 27,260 square milcs. The Province of Nova Scotia, lying south and southeast of New Brunswick, has, in general, a triangular form, the apex being at the isthuns of Chignecto, while the base, excluding Cape Breton island, is two hundred and fifty miles long, the extreme breadth being about one hundred miles. New Brunswick and Nova Scotia, together with Cape Breton and Newfoundland, surround the St. Lawrence basin, along the western side of which lies Prince Edward Island, curving like a crescent, parallel to the adjacent shores. Between New Brunswick and Nova Scotia lies the funnel like trough of the Bay of Fundy, separated at its head from the waters of the Gulf by an isthmus only sixteen miles in breadth. All these features, together with their minor details, such as are depicted in any good atlas, are, as will later appear, most intimately connected with the history of Acadia, both past and present.

Another important element in the physiography of Acadia is that of its Relief, i. e., the inequalities of its surface. Without presenting any extremes, it shows the usual geographical contrasts of highlands and lowlands, plains, plateaus and hills, a few of which rise to the dignity of mountains. Thus a great varicty of scenery is introduced, while "divides" or water sheds are formed, and these, besides acting in many instances as the chief con-
densers of moisture, determine the number, direction and character of numerous water-courses, give origin to lake basins, control the distribution of population, the position of county boundaries, the position of railways and other channels of communication, and, to a large extent, the natural products and the industries of different sections of the country.

The drainage system of Acadia, determined as above, presents many special features worthy of study. Few areas of similar extent are to be found which are so well watered, few have streams presenting greater attractions and variety in the way of beatity, few there are in which are such stores of energy to be hereafter drawn upon for purposes of industrial development. With these streams and lakes are linked many important events in the early settlement of the country; they are now, and must ever remain, controlling factors in the location of towns and cities; for they afford the easiest and cheapest means of bringing to the sea-board the products of the interior. No two of these streams are exactly alike, and the differences at once raise, in an inquiring mind, a desire to know their cause.

The climate of Acadia has already been referred to in a gencral way; but obviously in a country presenting so many and such marked contrasts in other physical features, there must also be many local peculiarities of temperature and lmmidity, and it is interesting to trace the causes to which these differences are due.
Dependent upon all the above causes, and varying with them, we have next to notice the peculiarities in the flora and farna of Acadia, embracing the distribution and character of our forests, with their native inhabitants; similar facts as to the denizens of our imland and coastal waters; and the best methods of preventing serious injury to both. In the same comection all economic prextucts, of the mine as well as of the forest and the fisheries, are of importance to those who take an interest in the welfare and development of the tand they inhabit.

Finally, behind all the features as exhibited by the Acadia of to-day, lies its carlicr history, mot merely that which is contained in human records since the time of the first European occupation of our shores, but that also of which the events are only to be found in the pages of the great Stome Book-events which, occurring, it may be, many
millions of years ago, afford the only intelligible explanation of how things came to be as we now find them.

In future chapters it shall be our aim to consider, in a simple way, the physiographic features briefly enumerated above, with their relations to present human interests; and, in the sequel, to trace, in an equally simple way, if possible, the main facts of our geological history.

## Notes On English Literature.

 By G. K. Butler, M.A., Halifax.
## Rip Van Winkle.

Posthumous: is a word which will draw from some pupils very amusing explanations. I have been told that it means a work written by a man after he was dead.
Woden: what other Saxon gods have given names to our days? From what source do we get the names of the montlis? How does it happen that September (septem, Latin, seven), is so-called? It is our ninth month.
P. 68, 1. 1.-Parse "remember" in this line. What verbs beside "must" have the same power? What are such verbs called? What is subject of "must?" 1. 10.-What is meant by "print their outlines on the sky?" Are Irving's weather notes true for Nova Scotia or New Brunswick? 1. I6Meaning of "fairy mountains?" They or their frequenters seem to have had magic power or this story couldn't be told. It might be interesting to see if any of the children actually believe it. 1. 21.-Why: "Dutch colonists?" When and by whom was New Amsterdam taken? It seems almost retributive that his successor on the English throne was a Dutchman.
P. (ro, 1. 2.-Parse "may he rest." 1s. 5 and 6.Meaning of "latticed windows," "gable fronts?" 1. 10.- [p to what date was the State a colony of (ireat liritain? liy comparing the historical dates and the length of Rip's sleep it is possible to limit the time within which the story is supposed to have happened. Is. 18 and 19.-Is it true that a "henpecked husband" is meek abroad? The general opinion now prevailing is, I think, quite the reverse. 1. $23 .-$-Ask for meaning of "curtain lecture" before giving any explanation. I was told by a seventh grade pupil that it was a lecture on curtain langing given by a wife to her husband. 1. 25.-Termagant is synonymous with what word just used? 1. 27.-How was Rip "thrice blessed?"
P. 70, 1. 1.-It is said that no man who can attract children and dogs can be bad at heart. The paragraph beginning with line 3 needs a considerable amount of dictionary study. 1. 8.-What do we call a "fowling-piece?" Macaulay in Horatius speaks of the "fowler." 1.37.-Meaning of "ado?"
P. 71, 1. 2.-"Well-oiled" is sometimes expressed by the phrase "easy going." 1.3.-Of what would Rip's "brown" bread likely be made? Of what is ours? 1. 10.-."Household eloquence" is another way of expressing what he earlier called by what name? 1. 13.-"A quiet answer" is said to turn away wrath. What about no answer at all? 1. 21.-In what way could Rip be said to "go astray?" Is Wolf true to dog nature? 1. 32. Does a "tart" temper become more tart? And is his statement about the tongue true? If so, there is a warning to us teachers in his words. 1. 36. et seq.-Compare the Deserted Village and its inn "Where village statesman talked with look profound." 1. 38.Meaning of "rubicund?" Any who have read the Spectator will remember Sir Roger's tenant the innkeeper who wished to have Sir Roger's portrait 011 his sign.
P. 72, 1.8 et seq.-This is our third schoolmaster this year. Which one was the superior? Are any of them true pictures of the present state of affairs? 1. 13.-Meaning of "junto?" 1. 20.-"Adherents" means what? Give in other words. What is political term in use? 1. 32.-Meaning of "call the members all to naught?" Parse "all." 1. 34. Another word here for "termagant."
P. 73, 1. 3.-Modern word for "wallet?" 1. 22Meaning of "bark" in this line? 1. 27.-Meaning of "impending?" Here it is used in its literal sense, generally it is not. 1. 37.-"Fancy" means what?
P. 74, 1s. 3 and 4.-Does Wolf behave naturally? 1. ro.-Is Rip true to his nature here? 1. 31.-How does an amphitheatre differ from a theatre? To whom do we owe the theatre? Who made use of the amplitheatre and for what purpose? Where are the most famous ruins found?
P. 75, 1. 1.-Parse "unknown." What part of speech is "that?" 1. 6.-"Outlandish" has much the same meaning as what word on preceding page? 1. 32.-Gencrally a person's knees act how under fear?
P. 76, 1. 33.-What does Rip mean by "blessed?" Compare French "sacre."
P. 77, 1. 20.-Why should he shave his head?
P. 78, 1. 6. What figure of speech is "the silver Hudson?" 1. 17.-Parse "very." What part of speech is it usually? 1. 34.-How many stars and stripes would there be in the flag as Rip saw it? How many now, and why the change? 1. 37.-"Metamorphosed" is a long word for our word? This word is Greek in origin. From what other languages does English derive words? How do other languages form new words? English generally goes to some other language for them.
P. 79, 1s. 5 and 6.-"Disputatious" and "phlegm" may be looked up in the dictionary. 1. 14.-"Bunker's Hill," '"Seventy-six," will bear comment. 1. ı8. - "Uncouth;" it may be remembered in what words the writer speaks of the dress of the old men on the mountain. l. 25.-What are the two great political partics in the States now, and which one is in power?
P. 8o, 1. I.-By what name do we speak of those whom the rabble at the tavern would have called "tories?" 1. r5.-Rij) must have been on the mountain at least how long? 1. 35.-"Precise counterpart" means what?
P. 8r.-On this page we are told that he had been away how long?

This piece, which is probably the best known of all Irving's works, has been dramatized and the part of Rip Van Winkle for many years was taken by the late Joseph Jefferson, who made it famous.
"An all-important function," says Dr. Eliot, "of the teacher, seldom to be seen in our public schools, is the helping forward of the brightest children. Our schools tend too much to become machines with an average product; the bright are held back, the dull are pressed forward, the pace must be a medium one. What a hideous injury to bright ehildren-almost as bad as as the injury which a labor minion works on the brightest members of the craft, the compelling them never to do their best. Fon can hardly do a greater injury to a human mind than that."
$W_{\text {ifen }}$ a great singer was told that another prima donna was in the field, she said, "Ah, that is good: we can never have too much good singing in the world." When a teacher hears of another's success, instead of feeling a pang of jealousy, she will say, "That is good; we never can have too much goorl teaching in the world."

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Benjamin Franklin, whtu copy of his Epitapil.

## Benjamin Franklin.

(Born January 17, 1706; died April 17, 1790).
The life of Benjamin Franklin, the second centennial of whose birth occurs on the 17th of this month, is so full of interest to boys and girls on account of his early struggles that we devote a little space to it. He was the youngest, except two daughters, of a family of seventeen children. He was sent to school at the age of eight, and showed great aptitude for study. The poverty of his parents, however, led to his being taken from school at the age of ten to "help in the shop," and he was afterwards apprenticed to his brother James to learn the trade of a printer. He was a great reader, wrote ballads, mastered arithmetic and studied navigation at the age of sixteen. He adopted a vegetable diet that he might save money to buy books.

At the age of seventeen he went to Philadelphia, having quarreled with his brother. He arrived there with one dollar in his pocket. He bought three rolls of bread and ate one as he walked up street with the others under his arms, and his pockets stuffed with stockings and shirts. A girl stood in a doorway and commented on the funny appearance he presented. This girl afterwards became his wife. The governor of the province became interested in him and promised to set him up in business, a promise which he failed to keep. Franklin spent eighteen months in London, perfecting himself in his trade of printer, reading and writing much; committed follies of which his strong common sense made him afterwards much ashamed. Returned to Philadelphia where he established the Pennsylvania Gazette and soon became a man of nark. His great intelligence and industry gained for him a prominent place in education, in municipal affairs, and afterwards in the councils of the united colonies. He studied diligently the ancient and modern languages, and was honored later with degrees from St. Andrew's, Edinburg and Oxford universities, and also from Harvard and Yale.

The invention of the lightning rod was a result of his studies in electricity. He proposed a plan of union for the American colonies whieh was rejected in England as too democratic. After the disastrous defeat of Braddock he organized a volunteer militia and took the field as their commander. Later he proposed a plan for the conquest of Canada. When the project of taxing the colonies came up Franklin was an uncompromising opponent. Oǹ
the eve of the Revolution, "he was," says Bancroft, "twice venerable, from genius, fame in the world of science, and age, being already nearly threescore and ten." In his voyages across the Atlantic he made observations on the Gulf Stream, and his chart of it forms the basis of charts now in use.

Shortly after the Peace of 1783 , he retired to private life, after having served his country for fifty-three years. "His venerable age, his plain deportment, his fame as a philosopher and statesman, the charm of his conversation, his wit, his vast information, his varied aptitudes and discoveries, all secured for him the enthusiastic admiration of a circle of ardent friends embracing the very widest range of human characters."

His epitaph, written by himself many years before his death, has become famous.

## The Disciplinary Value of Grammar.

## For the Revirw.

John Stuart Mill, the great apostle of the Utilitarians, has this to say about the teaching of grammar and analysis:

Consider for a moment what grammar is. It is the most eiementary part of logic. It is the beginning of the analysis of the thinking process. The principles and rules of grammar are the means by which the forms of language are made to correspond with the universal forms of thought. The distinctions belween the various parts of speech, between the cases of nouns, the moods and tenses of verbs, the functions of particles, are distinctions in thigught, not merely in words. Single nouns and verbs express objects and events, many of which can be cognized by the senses: but the modes of putting nouns and verbs logether express the relations of cbjects and events which can be cognized only by the intellect: and each different mode corresponds to a different relation. The structure of every sentence is a lesson in logic. The various rules of syntax oblige us to distinguish between the subject and predicate of a proposition, between the agent, the action, and the thing acted upon: to mark when an idea is intended to modify or qualify or merely to unite with some other idea: what assertions are categorical, what only conditional : whelher the intention is to express sumilarity or contrast, to make a plurality of assertions conjunctively or disjunctively: what portions of a sentence, though grammatically complete within themselves, are mere members or subordinate parts of the assertion made by the entire sentence.

Can it not be said that school instruction when employed upon the materials of grammar is both better from an intellectual point of view and also. more practical than when engaged in changing centigrade degrees to Fahrenheit, metric weights and measures to English weights and measures, or
even in explaining the action of the common pump? Can any discipline be better adapted than the severe discipline of grammatical study to check the illiteracy of the rank and file of our coming citizens, and thereby to ensure the stability of our Canadian democracy?

Teacier.

## Mental Arithmetic.

F. H. Spinney, Oxford, N. S

## Proportion.

The varicty of problems capable of solution by proportion is practically unlimited. For that reason I have, in mental mathematics, introduced this principle at an earlier stage than that assigned in the curriculum. In dealing with lower grades it is made very plain in the following way:
(a) 2 is the same relation to 4 that 5 is to ? (b) 12 " " 3 that 15 is to ?

Every member of the class after a short drill will give these answers very readily. Now, let us see if we cannot express the above in a shorter form:
(a) 2 is to 4 in the relation that 5 is to ?

That is somewhat shorter; but it takes up a great deal of our valuable time to write all those words for every question. "How does the telegrapher talk over the wires?" "By dots and dashes." Weli, let us talk by dots only. Ieet one dot stand for each word; and place one above another to save space:
(a) 2 is to 4 in the relation that 5 is to ?

$$
2: 4:: 5:(?)
$$

Now let us try a very simple question by this method:

If 8 apples cost 20 cents, how much will if, apples cost?

$$
8: 16:: \text { 2octs. : (?) }
$$

If a man can pick 16 bbls. apples in 10 hours, in what time can he pick 48 bbls.?
$16: 48::$ io hours : (?)
Advancing now to more diffictilt forms we have-
If 2 men in 3 days carn $\$ 10$, how macl: cill 3 men earn in 8 days?
The wages depends on what? The pupith can be led to see that the wages depends on the prowhet of the number of men and number of davs. Thes:
$6: 24:$ : 10 : (?)
Unitary problems will furnish abundant practice in mental drill for the lower grades. In the higher grades proportion can be used for the solution of all kinds of per cent problems. A coat cost $\$ 40$; it was sold for $\$ 50$; find the gain per cent? It is at once inferred that $\$$ so is the gain. Then:

$$
\$ 40: \$ 10: \text { : } 100:(?)
$$

A merchant sent his agent $\$ 618$ to be invested in goods after deducting his commission for buying at 3 per cent; find value of goods bought?
\$103: \$618: : \$100: (?)
A bankrupt has $\$ 6000$; his debts amount to $\$ 8000$. How many cents can he pay on the dollar?

$$
\$ 8000: \$ 6000:: \$ 1:(?)
$$

The thoughtful teacher can apply this principle to many other kinds of problems. Its conciseness is very pleasing to the pupil after he has learned the longer methods usually adopted. The form is also very attractive, and it will be observed that pupils who formerly took little, or no interest, in arithmetic, become quite enthusiastic over this very interesting method.

## Arithmetical Problems-Grade VIII.

1. Find area in acres, etc., of a triangle whose base is 600 yds . and height 250 yds .
2. How ligh is a cylinder of 20 in . in basal diameter and holding 30 gals.?
3. Find volume of a cone to in. in basal radins and 30 in . high.
4. Find area of ring between the circumferences of two circles whose radii are 30 in . and 36 in . respectiv ly
5. If the cost price is $2-3$ of marked price and the discommt 10 per cent, find gain per cent.
6. A note of $\$ 300$, dated May 1o, at 3 mos., with interest at 4 per cent, was discounted May 3oth at 7 per cent?
7. Find compound interest on $\$ 450$ for 1 yr. 6 mo. at 4 per cent, payable half yearly.
8. Divide $\$ 60$ among $\mathrm{A}, \mathrm{B}$ and C , so that A may have half as much as $B$, and one-third as much as $C$.
9. Find area of the larger of two concentric circles when the radius of inner is 10 ft . and radius of outer 15 ft .'
10. A room 12 ft . by 18 ft . is 10 ft . high, has 3 windows, 3 ft . by 8 ft ., 4 doors 3 ft . by 7 ft ., to be papered with paper 18 in ., 8 yds . to roll, at 15 c . a roll, covered with carpet 27 in . wide at $\$ 3$ a yd; find cost of each.
11. A house worth $\$ 4500$ is insured for threcfourths its value at $11 / 2 \%$; find net cost if it burns.
12. A ceiling 5.6 in . long, 4.8 in . wide, is plastered at 25 c . a scl. yd .; find cost.
. Instiers-1, 15 ac. 79 rds. 10 yds. 2 ft .36 in. 2, 26.47 inches. 3, 3141.6. 4, 12.4.0736.5.35\%. 6. \$303.12, \$298.76. 7, \$27.54. 8, \$10, \$20, \$30. 9. 706.86. 10, $\$ 1.8_{5}, \$ 96.11, \$ 1175.62 \frac{1}{2}$. 12 , $\$ 8.04$.

## Literature in the Primary Grades.

Many of our primary teachers know of the delights that good wholesome children's literature inspires. These teachers have sympathy with childhood; they love what the children love; they know how to tell-not read-a good wholesome story. These stories, if properly selected and well told, are a stepping-stone to the love of good literature-and what more precious possession can any child take away from school than that.
There are many things that go to make up a good story. It should be childlike, and suited to the understanding of children. It should be simple, straightforward, pure. It should be full of fancy. To make a child love good reading, give him something that appeals to his love of the beautiful. Introduce him to thoughts that are worthy of being remembered. He is an active little being, hence the story must have strong healthy action.
Mrs. Nora Archibald Smith tells us that "we must beware of giving a one-sided development by confining ourselves too much to one branch of literature; we must include in our repertory some well selected myths, fairy stories which are pure and spiritual in tone, and a fable now and then. Nature stories, hero tales, animal anecdotes, occasional anecdotes about good, wholesome children, neither prigs nor infant villains, plenty of fine poetry, and for the older ones legends, allegories, and historic happenings."

Dr. G. Stanley Hall says: "Many boys enter college who have never read a book through except cheap novels. On the other hand, no one commends a bookish child. But worse than either is the child whose brain is saturated with low or cheap reading, and is altogether illiterate for all in print that makes the ability to read desirable. In the selection of school reading the children's votes should be carefully taken though not always as final. Of one hundred and twenty-four Boston school-boys of thirteen years old, who were asked what book first fascinated them, "Robinson Crusoe," "Mother Goose," Jack the Giant Killer," were mentioned in that order of preference by the great majority, and might more readily be allowed young children than most others named. "Cinderella," "Jack and the Beanstalk," "Tom Thumb," "Gulliver," "Aesop," "Red Riding Hood," "Arabian Nights," which came next, are unexceptionable, and should be told every child who has not heard them before coming to school."

Miss Sarah Louise Arnold writes: "Learn what the children like and begin with these likes. The field of literature is well suited to the children. The best of literature is that which was written for the children of the world. It should not be forgotten that if we would teach the child to like that which is good in reading we must establish the liking in early years. It is not enough that we should tell him in later days that certain books are good and bid him to read them. When he is grown up he will choose that which he likes, and our work is to lead him to like good things. We cannot, then, begin too early. The very cradle songs should be wisely chosen. The nursery tales should be those which have fed the children of many an age and clime."
In the next number we shall begin a series of articles in the literature suited to the different grades of the primary schools.
Dr. Clifford contributes to the Baptist Times a letter on the settlement of the education controversy in England. He says:
"We are encouraged to hope that the people of England will obtain these three things: (I) popular control of State education; (2) the abolition of theological and ecclesiastical tests in the State teaching profession; (3) the exclusion of sectarianism of every type from the curriculum of the schools. "Let us," he adds, "municipalize education on the broadest and most democratic lines. Abolish secresy of management; bring the administration to the light of day. Let the people not only rule themselves through their freely and directly elected representatives, but also let them know all their representatives do, and how they do it."-Educational Times.

An "Old Subscriber," on taking leave of the Review, says:
"Your journal keeps improving. Every number is filled with useful hints. I wish to thank all the contributors for the help and pleasure received from the different subjects explained and discussed. I consider the Review of infinite value to the practical teacher. A Happy and Prosperous New Year to you all!

A good reading lesson always furnishes something worth talking about. The teacher must remember, however, that it is the pupil who needs the practice in talking. The teacher should keep as still as possible. A great talker is seldonn a good teacher. Let the pupil do his full share of the talking.-Selected.

## Recitations for the Primary Grades.

## The Leaves and the Wind.

"Come little leaves," said the wind one day,-
"Come o'er the meadows with me and play;
Put on your dresses of red and gold.-
Summer is gone, and the days grow cold."
Soon as the leaves heard the wind's loud call, Down they came fluttering, one ard all; Over the brown fie'ds they danecd and flew,

Singing the short little songs that they knew:
"Cricket, good-bye, we've been friends so long!
Little brook, sing us your parting song,-
Say you are sorry to see us go;
Ah, you will miss us, right well we know !
"Dear little lambs, in your flecey fold, Mother will keep you from harm and cold; Fondly we've watched you in vale and glade; Say, will you dream of cur loving shade?"

Dancing and whitling the little leaves went;
Winter had called them, and they were content,
Soon fast asleep in their carthy beds,
The snow laid a coverlet over their heads.
-George Cosper.

## Gems (Selected.)

Suppose we think about number one, Suppose we all help someone to have fun; Suppose we ne'er speak of the faults of a friend,: Suppose we are ready our own to amend . Suppose we laugh with and not at other folk, And never hurt anyone "just for a joke;" Suppose we hide trouble and show only cleer. 'Tis likely we'll have quite a "Happy New Year."

## Puzzles

1. Feet have they, but they walk nct.-Stoves
2. Eyes have they, but they see nct. $\mathbf{P}$ (tatoes.
3. Teeth have they, but they chew nct.-Saws.
4. Noses have they, but they smell nct.-Teapots.
5. Mouths have they, but they taste not-Rivers.
6. Hands have they, but they haindle not--Clocks.
7. Ears have they, but they hear not.-Cornstalks.
8. Tongues have they, but they tak not.-Wagons.

Golden Days.

Chick-chick-a-dee-dee! Saucy note
Out of a sound heart and a merry throat.
As if it said. "Good-day, goo:l sir!
Fine afternorn, old passenger!
Happy to meet you in these places
Where Janmary brings few faces."
-Ralph Waldo Emerson.

## Receipt for a Happy New Year. <br> Recitotion for four little children.

First-
Take each of the three hundred and sixty-five diys,
Now coming to us along sunshiny ways.

## Second-

And put into it just as much as you may
Of cheery hard work and of jolly good play.
Third-
And every once or twice in a while
Just tuck in a corner a glad little smile.

## Fourth-

Then fill all the spaces below and above,
As full as can le of kindness and love.
All-
Just follow this rule-you'll have, it is clear, The happiest kind of a happy New Year.
-Selected.

## The Silly Young Cricket.

$\therefore$ silly young cricket accustomed to sing
Through the warm sunny months of summer and spring,
Began to complain when he found that at home
His cupboard was empty and winter had come.
Not a crumb to be found
On the snow-covered ground, Not a flower could he see, Not a leaí on a tree;
"Oh! What will become," said the cricket, "of me?"
At last by starvation and famine made lold,
All dripping with wet, and trembling with cold,
Away he set off to a miserly ant,
Tc see if, to keep him alive. he would grant
A shelter from rain,
And a mouthful of grain
He wished only to borrow,
And repay it tomorrow;
If not, he must die of starvation and sorrow.
Saicl the ant to the cricket, "I'm your servant and friend; Put we ants never borrow, we ants never lend.
But tell me, dear sir. did you lay nething by
When the weather was warm?" Said the cricket, "Not I.
My heart was so light
That 1 sang day and niglit.
For all Nature looked gay!"
"You sang. sir, you say?
(on then," said the ant, "and dance winter away."
Thus ending he hastily opened the wicket
And out of the house turned the poor little cricket.

## A Laugh in Church.

She sat on the sliding cushion
The dear wee woman of four:
Her feet, in their shining slippers,
Hung dangling over the floor.

She meant to be good-she had promised; And so with her big brown eyes, She stared at the meeting-house windows, And counted the crawling flies.

She looked far up at the preacher; But she thought of the honey-bees', Droning away in the blossoms That whitened the cherry-trees. She thought of the broken basket, Where, curled in a dusty heap, Three sleek, round puppies, with fringy ears, Lay snuggled and fast asleep.

Such soft, warm bodies to cuddle, Such queer little hearts to beat
Such swift, round tongues to kiss you, Such sprawling, cushiony feet!
She could feel in her clasping fingers The touch of the satiny skin,
And a cold, wet nose exploring The dimples under her chin.

Then a sudden ripple of langhter Ran over the parted lips,
So quick that she could not catch it With her rosy finger-tips.
The people whispered, "Bless the child!" As each one waked from a nap;
But the dear, wee woman hid her face For shame in her mother's lap.

Speaking about nature study, reminds us of a certain boy well known to us in the remote past. Before he was twelve he knew the name of every fish in the inlet of the Atlantic, on the coast of which he lived; knew not only the name, but the ways of it in the deep; when it came and went its value for food or market; its anatomy, coloring; its favorite bait, etc. Of birds he knew the names and they were many; could accurately describe the structure of each nest, and the materials out of which it was built; the number of eggs; their size and color; the location of the nest on the ground, in tree, under or on rocks. All other animals, wild and tame, he knew the ways and the names of; likewise the names of all the flowers, plants, shrubs, trees, wild or cultivated. All this and much else he learned from no schoolmaster, but from Nother Nature herself. In the large city, the child must learn these things in a second-hand way, from the formal lesson in the book, but the country boy or girl, more happily situated, absorbs knowledge from every bank and brae, rock, rill, mountain, sea, and lake.-Western School Journal.

## A Well Conducted Recitation.

The subject of the lesson was Siberia, and the whole class was transported thither in imagination before the lesson had proceeded far. The pupils were led to formulate statements by questions that made them think what must be if certain known facts were taken into account. For instance, when there had been a little talk about the three great rivers, the teacher asked what must be the state of things near the mouth of these. All were very ready to tell of the frozen, inaccessible water. But when she asked what must happen when the spring sun thawed the upper or southern portions of these rivers, all were not so ready to reply. So she asked for the name of a river near by whose rise and course were familiar to the class. She said, "Let us imagine some things about this river." Then she graphically pictured a state like that common to these Arctic rivers, readily securing the statement, "When the southern portions of these rivers melt, the water, unable to follow the course of the riverchannel, must spread out over the land." Thein they were ready to understand the heavy floods of the tundras.

When they spoke of the fossil elephants found in the ice of the Arctic slope, so well preserved that dogs would eat the thousand-year-old meat after it was taken from its natural refrigerator, the question was asked, "What is meant by the word fossil?"

It was very interesting to note the readiness with which the boys and girls told what they knew. "I have seen a fossil shell." "I have seen a fossil plant." "Coal has sometimes the print of a fossil fern." Gradually the statement was secured that a fossil was an object that had become petrified, or turned to stone, and that the elephants were like fossils, in their cold-storage state. The teacher talked about the Don Cossacks and gave some excellent word-pictures of the life led by the nomadic tribes of the north. Each point discussed seemed to lead naturally to the next. There was perfect freedom, yet perfect order. No reply, however unexpected or wide of the mark, failed of a pleasant reception and apt word of comment that precluded all possibility of disturbance. Preparation was the keynote of the recitation.-Selected.

The Review and Canadian Magazine for one year $\$ \mathrm{r} .80$ (not $\$ 1.50$ as stated in the December number).

## Questioned no More.

Take a child for a cute answer. Wednesday three teachers from Morgan Park visited our schools for the purpose of looking into Prof. Hall's method of teaching arithmetic. The professor took them into the fourth grade room to witness a recitation. The questions were answered so readily that one of the teachers expressed her doubts, intimating the children had been crammed beforehand.
"Ask some questions yourself," said the professor.

This question was propounded to little Leslie George by one of the Chicago teachers:

Divide seven by two-thirds.
Leslie readily solved the problem and then, as is customary, applied the example to some practical question. Said Leslie: "I had seven pics which I divided among some children, giving two-thirds of a pie to each child. How many children were there?"

Leslie began: "Reducing the seven pies to thirds gives twenty-one thirds. Each child received twothirds of a pie, so there would be as many children as two is contained in twenty-one, which is-"
Leslie stopped, knit his brows, looked perplexed, thought deeply for a moment, then a light came over his face, and, looking up, he shouted: "Ten children and a baby!"
"How much pie would that give the baby ?" asked Prof. Hall.
"One-third," promptly answered Leslic.
The hand of a little girl went up.
"What is it?" asked the professor, turning to Rev. Greene's little girl.
"Please, sir, that is too much pie for the bahy."
The Chicago teachers asked no more questions. They were fully satisfied.-Waukegan Daily Register.

A little maid with a social nature was anxious to come into the parlor when her mother's friends arrived. Finally, mamma said, "Yon may come in when the ladies are here if you can be quiet, and remember that little girls should be scen, not heard." The little one pondered for a moment, and then asked, "But, mamma, what shall I do with the mouthful of words I've got?"


## Too Many Distractions.

I cannot help thinking that too many distracting matters are allowed to find a place in connection with our public schools at the present day. Many things that are well enough in moderation, yea, thoroughly commendable, become mischievons distractions through excess. Among these I would name athletics, class and school "contests," dancing and other social amusements now becoming so common in connection with school and class "functions." To me, it is very clear that pupils' minds must be drawn away from their legitimate school-work by these things, in a great many cases. By this means, the pupils are robbed of the benefits the schools should confer upon them, and the money of the taxpayers, who support our schools, is wasted to a great extent. The evil is growing rapidly, as it seems to me; and, if it is not checked by the action of the pupils, teachers and school authorities, there will be a justifiable explosion, by and by, when the people come to have a "realizing sense" of the evil. -School and Home Education.
"My school," said a teacher, "is the world in miniature. If I can teach these boys to study and play together, freely and with fairness to one another, I shall make men fit to live and work together in society. What they learn matters less than how they learn it. The great thing is the bringing out of individual character so that it will find its place in social harmony."

A writer tells how a little child once preached a sermon to him.
"Is your father at home?" I asked a small child at our village doctor's door-step.
"No." she said, "he's away."
"Where do you think I could find him?"
"Well," she said, with a considering air, "you've got to look for some place where people are sick or hurt, or something like that. I don't know where he is, but he's helping somewhere."
L.et the class choose sides as for an old-fashinned spelling match. The teacher may then write upon the board various numbers, the more difficult to read the better. Then proceed as in a spelling match, each side reading in turn, and see who will "stand up the longest."

## Carleton County Teachers' Institute.

The annual session of the Carleton County (N. B.), Teachers' Institute met at Woodstock, on the 21st. and 22nd. December, H. F. Perkins, Ph.B., presiding. About ninety teachers were present, representing nearly every school section in the county, and the proceedings were marked with great interest. Opening addresses were made by President Perkins, Inspector Meagher, and Mr. T. B. Kidner, A paper was read by Mr. R. E. Estabrooks on Professional Etiquette. After a spirited discussion a committee consisting of Messrs. Estabrooks, Draper and Meagher, was appointed to draw up a set of rules to govern the professional conduct of teachers. In the afternoon a paper on the Teaching of History was read by Mr. James O. Steeves. After a discussion on this the institute adjourned to the Woodstock manual training rooms where an interesting lesson was given by Miss Louise Wetmore, the teacher. Inspector Meagher presided at the public educational meeting held in the evening, where addresses were given and a fine musical programme carried out.
During the second day's session Miss Louise Wetmore gave a lesson on cardboard work and a paper was read by Dr. Brittain on the Consolidated School vs. The Little Red Schoolhouse. Miss Nellie Bearisto read a paper on the Muscular Movement in Writing, illustrating methods by blackboard examples. The following officers were elected: H . F. Perkins, president; Jas. O. Steeves, vice-president ; R. E. Estabrooks, secretary ; W. M. Crawford and Miss Nellie Bearisto, additional members of executive. A meeting of the county teachers' association was held before the close of the institute. Mr. Haviland was elected president and Mr. Estabrooks, secretary. Mr. Draper was appointed a delegate to the provincial convention.

Tine Review seems to get better each month and I would find it very hard to do without it, as we have been inseparable friends ever since I began teaching. Its helpful hints pay the subscription price many times over in the course of a year.M. E. T.

## Picture Study Queries.

C. G.-No! The famous Campanile that fell down in 1897 was St. Mark's, Venice. It is being rebuilt.
R. McK.-It would be excellent if the teachers in a large school would compare results of exercises on these pictures, or teachers in a parish could confer together. I should appreciate packages of matter of that kind.

Gertrude.-The nimbi over the heads of the angels are painted as transparent discs. These symbols are very ancient, earlier than Christianity, in fact, and probably signified power. Wings are also symbols, e. g., of swift flight.

Country Teacher.-I cannot' tell you of any other descriptions of Blashfield's picture. You may be interested in H. W. Longfellow's "The Belfry of Bruges." Let the scholars recall Canadian boat-song,--"Ah, I remember with what profound emotion I listened once more to those tuneful village chimes," etc.
R. S. T.-True, the sentiment of "Liberty Bell" is not British, but a picture of it helps the children to understand how one of such dimensions is fixed to a beam.

Belle.-Chancer wrote climbe; Latin campana; French scampanarc. Bell-ringers are sometimes called campanologists.
H. B.
S. E. C.-The picture, "Christmas Chimes," in this month's Review, is just what I needed to frame for a Christmas pieture for our school. The Review is very helpful to me. I always find something bearing on my work each month. I am teacher of Grades VII, VIII, IX, and X, and principal of a superior seliool of 125 pupils.

## How to Make my New Year Happy.

Tell me all the good you can about the people that you know. Tell me only the good about the people of whom you speak. Tell me the things that will make me think well of people and of life. Tell me the things that will make my sun shine, my heart glad, and my soul to rejoice. Tell me the things which will straighten tup my thinking, and give me the right principles of work and of play and of thought. Tell me the things which will make me ashamed of compromise and pretense.-Edzuard Franklin Reimer.

## CURRENT EVENTS

A new inland sea has been formed in Southern California, by the inflow of the waters of the Gulf of California into the Salton basin. The flooded district is said to be a hundred miles in length, and twenty-five miles in width. Underground fissures caused by earthq"ake shocks are supposed to admit the water from the gulf into what has hitherto been a dry basin below sea level.

Fossil bones of a gigantic animal of the dinosaur tribe have been found in Montana. The greas saurian was thirty-nine feet long; and, unlike most of the huge animals of that period, was a flesh-eater.

A now paving material, elastic, tough and durable, is now being tried in England. It is made of tar mixed with iron slag, and is called asphaltinc.

The oxy-acctylene blowpipe is now employed in welding. It gives a temperature much higher than that of the oxyhydrogenl flame.

A British explorer has visited a part of Abyssinia until now unvisited by white men, and has found there a very rich gold region, and thousands of the natives cugaged in washing gold.

The flagship of Prince Louis marle the voyage from New York to Gibraltar in seven days, seven hours and ten minutes, the average speed being something over 18.5 knots an hour. This is the highest rccorded speed for warships, for stuch a distance.

The withdrawal of the liritish troops from the West Indies, which is about completed, is in accordance with the new policy of concentation of the forces. Coaling stations will be maintained at Jamaica and St. Lucia. The strong defences at the latter place, from which the garrison was withdrawn on the fifteenth of last month, will be kept in a sta:c of efficiency; and tronps can be quickly sent to occupy them if occasion requires.

It is understood that the dockyards at Halifax and Esquimault will be transferred to Canada, and become the headquarters of Canadian naval militia for the Atlantic and Pacific coacts respectively.

The resignation of the Balfour goverument, and the appointment of Sir Henry Campbeli-Bannerman as leader of the new government $i$, the occasion for a change in court ceremonies which recognizes for the flrst time the position of prime minister in the British govenmen: Hitherto, in all state ceremonies, the premier took rank only as a Privy Councillor. 11 is now ordered that lic shall in foture "have place and precedence next after the Archbishop of York," The only persons who rank above the Archbishop of York, excepting member of the royal family, are the Archlishop of Canterbury and the Lord High Chancellor.

Captain Amundsen. a Norwegian explorer who, for the past two years and a hali las been working al ng the northern coast of Canada in search of the megnetic pole, has, as before ammunced, succeeded in making the morthwest passage. His little vessed, a +7 -ton sinop named (inina
in which he left Norway in June, 1903. is now wintering near the month of the Mackenzie River, and may easily continue her voyage next summer through Bering Strait to the Pacific Ocean. All the waters throug't which Captain Amundsen has sailed have heen reached by earlier explorers; but his vessel will be the first to enter the $\therefore$ rctic Sea fron ci: great ocean and come out into the other after sailing around the northern end of this continent.

Another explorer intends leaving the mouth of the Mackenzic River next summer in search of unknown lands. His name is Mikelsen, and his purpose is to go northward along the western shores of Banks Land, in the expectation of fiading land still further north. If his plans can be carried ont, he will return to the mainland for next winter; and make his final effort in the spring of 1907.

Halfway between Sydney and Louisburg, the Cape Breton Coal and Iron Company will build their new town of Broughton, which they will make the headquarters of their business in the development of the great coal beds in that part of Nova Scotia.

Immense deposits of magnetic iron ore have been discovered at the mouth of the Columbia River, and others farther north and in Canadian territory. It is thought that British Columbia will yet have stecl works to rival those of Cape Breton and Ontario.

The reassembling of the Hague Conferensce may be indefinitely postponed, because of the invitation issued some time ago by the government of Switzerland for an international conference at Derne to consider amendments to the Red Cross convention. Until this matter is disposed of, the date of the Hagne Conference camot be fixed.

Turkey has yielded to the demands of the powers in respect to the government of Macedonia.

Encouraged by Japan's success, China seems about to resist foreign influence, and maintain her right to govern her own lands and her own people in her own way. No further concessions, it is said, will be granted to foreigners in Chinese teritory; and efforts will be made to cancel those already granted. 'lhe Boxer mosement was a popular uprising against forcigners as individaals. The new movement is an organized movement for the protection of Chinese sovereign rights against foreign aggression.

Sea gulls have been brought into use as ocean carriers, and may prove as useful in that way as carrier pigeons are on land. lixperiments recently made in France have lead ter this conclusion.

The premier has summoned a forestry convention to meet at Ottawa on the soth, bith and 1 ath of this month, under the anspices of the Canadian leorestry Association. The preservation of our existing fore-ts, as the most important sumece of the world's timber supply of the future and the med of tree planting on our western prairies, are :mong the suljects that will come un for discussion.

Mutual hatred of the United States is credited with restoring friendly relations between Columbia and Venezuela.

It has been decided that the best route for the new Transcontinental Railway lies north of Lake Abitibi. The location of the route through New Brunswick has not yet been determined.

Both in the Baltic Provinces of Russia and in the Caucasus region, serious disorders still prevail, amounting almost to organized rebellion. Several towns in the Baltic Frovinces have fallen into the hands of the insurgents. The people of these provinces are not Russian, but Lithunian, and formerly had a government of their own; but Lithunia was united with Poland in the fourteenth century, and has since had no independent existence.

The Czar has definitely refused to grant universal suffrage at the demand of the socialists and others. The new representative assembly, if the disturbing elements do not prevent its election, will be chosen under a restricted franchise.

All the horrors of civil war are filling the crowded cities of Russia, where striking and riotous workmen are coming into conflict with police and soldiers; and in smaller towns, particularly in the southern provinces, where the people who suffer from the strike have in some instances turned upon the strike leaders for revenge. Anarchists who have long laid their plans for the overthrow of the monarchy, are unwilling to let it pass into the new form of a constitutional monarchy without a final struggle. What they now fear is not the continued rule of the Czar, but a popular govermment that will indefinitely postpone their plans. The most terrible scenes of bloodshed have occurred in the southwest provinces of Russia, where thousands of Jews have been killed by Christians, not because they were Jews, but because they were social-democrats, who threatened the very existence of Russia, as their avowed purpose is to overthrow the Russian government and all other governments and abolish national lines. They openly advocate killing every ruler or official, whether elected or appointed, so that none shall dare attempt to rule. The people who were responsible for the recent masssacres assumed that all Jews were social democrats, which may not have been far wrong as a general assumption, and believed it necessary to kill them all or drive them out of Russia. The same political reasons account in part for the disturbed state of the Caucasus, where, however, the social-democrats are not Jews, but nominally Christians. Here, in one region, where the central government is unable to maintain its authority, the theories of the social-democrats and anarchists are being practically tried. If a man is guilty of stealing, or of any similar offence, he is not tried and punished. His neighbors avoid his company and show amends. If, in the meantime, he is thought to be their disapproval until such time as he repenis and makes dangerous to the community, some one is secretly detailed to shoot him down in the street. This is the sort of rule the people have to fear if the anarchists get the upper hand; and bad as was the old form of alsolute monarchy, they think it better than this.

## SCHOOL AND COLLEGE.

There were eighty-six applicants for third class license at the N. B. Normal school examinations in December-sixty-three from the English department, and twenty-three from the French.

Mr. F. A. Dixon, M. A., of Sackville,N. B., has been appointed to succeed Inspector Mersereau, M. A., who has obtained a year's leave of absence which will be spent in the West. Mr. Mersereau is the senior inspector of New Brunswick, and during his long term of service has won many friends by his impartial and vigorous administration. Mr. Dixon, his successor, has had large experience as a teacher and his scholarship and knowledge of the schools makes the appointment a very fitting one.

At an interprovincial convention held at Moncton on the 28 th November, arrangements were made to issue four primary readers for French schools in the Maritime Provinces. The books will be ready at the end of this year.
Mr. G. H. Harrison, B. A., for many years principal of the Carleton County Grammar School at Woodstock, N. B., has resigned his position to enter into a general insurance business in that town. He will be succeeded by Mr. Chas. D. Richards, B. A.
Mr. Herbert Rose, of Hamilton, Ont., Rhodes scholar from McGill, has won both the Ireland and the Craven scholarships at Oxford University. Mr. Rose graduated with highest honors from McGill and his sticcess at Oxford has been phenomenal. He has won the Craven scholarship at the beginning of his second year, and this is not usually attempted until the third year. Winning the Ireland at the same time makes the achievement an exceedingly rare one. Among those who have succeeded in winning both scholarships are such men as the Right Hon. Herbert Asquith, a member of the new CampbsllBannerman cabinet; Goldwin Smith and William Glalstone.

Mr. S. Kerr, of the St. John Business College has just completed the thirty-eighth year of his management of that institution. Mr. Kerr's influence as a teacher of business methods and practice has steadily increased with the years, and there are many men scattered over the continent who owe much of their success to the sound and thorough training received from him.

The Maritime Business College, Halifax, Messrs. Kaulback \& Schuman, principals, send it the Review their New Year's cheque as usual, good for the payment of "One Thousand Good Wishes. The cheque is cordially accepted, and the Review extends its best wishes in return for a year of increasing prosperity to this excellent institution.

The name printed Mrs. L. D. Jones in the report of the Restigonche County Institute in the December Review should read Mr. L. D. Jones.

Allow a boy to neglect his studies, you allow him to neglect his duties; teach him to "skim over" his lessons, and he will learn to "skim" through life But teach him to be truthful, conscientious, and thorongh in his school work, and he will be the same forever.-Herbert L. Wilbur.

# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

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Si. John, N. B.

Do readers of the Rewew scan its pages and articles closely to see what the re is bearing on the ir work, not only of this but of future months? Du they preserve the paper for future reference? How much there is in this number, for instance, worthy of study: A university professor who has made the natural features of these provinces a life long s:udy gives a gengraphy lesson of absorbing interest : I student of art shows how teachers can make the best use of the picture "Saverl," white a former teacher in one of our schoms, now studsing in a distant city, begins a series of sketches on the history of art; there are helpful articles on maturesturly on the teaching of English, current events, how to make Friday afternoons interesting-all of which and more should be of the greatest wse to readers if they study the Rewifw.

The Review and Canadian Magazine, both for \$2.80.

Are you forming any plans for a school garden, large or small, next spring ?

The Simmer School of Science will meet at North Sydney, Jthy 3rd to 20th.

The Provincial Educational Institute of New brunswick will meet at Chatham on the last three days of June.
1)r. Jlannay's listory of New Brunswick will be puldished some time during this year. It will deal wi herents and persons from the earliest times rimun to the present. One of the comtributors is Supt. 1)r. Inch who will write on educationai topics 1)r. Ifannay has been engaged on the work for some years, athl its early appearance will be looked fir with much inierest.
. Icadiensis for January begins its sixth year. making a record in Acadian literature, as no magazink hitherto published in the Naritime Jrovinces hats reached that limit of existence. The magazine untler the manarement of Mr. D. R. Jack bits fair to sec many years more of usefnlness with a more generons simport than in the past. The contents of this montlis mumber embrace several valuable articles among which is Heraldry in Brief, a very realable and interesting accomnt of that ant.

The gevernment of New Brunswick will shortly introluce a bill into the legislature to so amend the fiducation law as to provide for compulsory attendane of cibilelren at schmols. While attendance in wany parts of the province is fairly satisfactory, it is mot so in whers: and there are geod grounds for W. lief that even in this age of free schmols many children are setting but very slight advantages from then. The REvew has held that if the gevemment undertakes to establish free publice schmole and arranges for their suppert it should also see that paremts be compelles to send their childien for a eriven mumber of davs in the ve:口

The next meeting of the National Educational Association of the United States will be held at San Francisco, July 9 to 13 .

Note the official announcement of Superintendent Dr. A. H. Mackay, on another page. It is of special interest to the teachers of Nova Scotia.

Rev. Hunter Boyd, of Waweig, N. B., has kindly offered two booklets on the life and work of Landseer as prizes for the two best sets of class questions and suggestions on the picture, "Saved," in this number,-the papers to reach him by the 18th February.

The scarcity of desirable teachers is a serious matter in many parts of the country. A better recognition of the teacher's work, better salaries, and better preparation on the part of the teacher, will improve this condition of things.

Dr. William Rainey Harper, president of Chicago University, died of cancer on the tenth of January, in the fiftieth year of his age. During the fifteen years of his presidency his brilliant executive talents and energy have been devoted to spending wisely the immense sums of money which have been given to that university which is now one of the leading institutions of learning in America. When Dr. Harper found that his disease was incurable the bravely kept on with his duties, calmly awaiting death.

The treatment of consumptives is properly engaging the attention of leading men and physicians throughout the Dominion. On the 28th March the sixth annual mecting of the Canadian Association for the prevention of consumption and other forms of tuberculosis will be held in Ottawa. His Excellency Earl Grey widl preside at the evening meeting at which Dr. Arthur J. Richer of Montreal will deliver an illustrated lecture on consumption and the appliances now in use to check its progress.

One of the most beneficent institutions of Canadt is the frec hospital for consumptives near Gravenhurst, Ontario. This is largely maintained by the subscriptions of henevolent people, and has been the means of restoring to health many hundreds of patients since the work began. Contributions for this praiseworthy object will be received by Mr. W. J. Gage, Toronto.

## Nature-Study for February.

The lesson on snow in another column can be used for several interesting lessons at times during the month when there are falls of snow. Flakes of snow caught on the nap of a piece of black cloth, can be observed and sketched quickly. The six rays of the crystals are always plain, but there may be an almost infinite variety of ornamentation. The same forms may be looked for in frost on the window panes, on grass or in shell ice. The frost on window panes will be well worth studying and sketching.

The records of temperature for the month of January will be worthy of preservation, for it was the warmest mid-winter month for many years. Continue the observations on the weather for this month and make daily averages of the temperature. Keep a record of stormy, fine and cloudy days. Have we had much snow this winter? Much rain? Show what a little difference in temperature will bring rain instead of snow. Contrast the bare uneven roads and the rumble of wagons with the snow-covered roads and the merry sleigh bells. Why do children like snow? Why lumbermen? Farmers? Why people in other occupations? What animals like snow? Do dogs? Cats? What kind of snow storms are pleasant to be out in? What makes some snow storms unpleasant? How does crust form ?

The sun's apparent course during the day may be noted by watching its progress across the room. Note where it is at twelve o'clock; in what part of the sky it is at sunrise and sunset. How many hours is the sun above the horizon on the fifth of February? On the fifteenth ? and on the twentyeighth? The weather will very likely be colder in February than in January. In which month do we have more sunlight?
Notice the planets and stars during this month. Jupiter still leads them all in brightness, and keeps his position near the Pleiades, with Orion and Sirins following after. Farther to the east is the constellation of the Sickle, with the bright star Regulus in the end of the handle. Notice the position of the Great Dipper with the handle pointing to the horizon. Try to follow its course from night to night with a view to understanding the motion of those stars in the heavens romnd the pole. Do they go below the horizon? Notice the rising of Arcturus in the north-east about io oclock. It can always be found by continuing the curve of the handle of the Dipper.

Our Native Trees.<br>By G U. Hay.<br>The American Larch,

The American larch (Larix Americana), or tamarack, or hacmatack, for it is known by all these names, is our only cone-bearing tree which sheds its leaves in autumn. A swamp forest such as one sees in the north-castern part of New Brunswick is a beautiful sight in early November when the green-ish-yellow leaves of the tamarack are ready to fall. It is tien that this attractive and graceful tree receives most attention, its full chusters of slender delicate leaves, with the hue of death already upon them, forming a striking contrast with the dark green leaves of the surrounding evergreens. Why is the larch the only cone-bearing tree which sheds its leaves in autumn? Why, incleed! It is not because its leaves are large enough to collect the snows and ice of winter. They are really smaller than the pine leaves which they resemble somewhat by beins gathered in bunches. Small evergreen leaf forms are supposed to be a modern contrivance, as the geologist woukd say, adopted for the purpose of protecting these trees from the ice and snows of an arctic winter. One of them has put on the fashion of a deciduous tree by disrobing in autumn and clothing itself with a fresh garment of green foliage every spring. Will the other evergreen trees follow the fashion set by this graceful beanty -the tamarack? We do not know. If one knew more about the nature of trees and their life-history he might attempt an answer.

Watch the tamarack put out its sprays of delicite green leaves in late May; but before that mark ts crimson little flowers as they appear, the fertile ones. in catkins, to swell into red fleshy cones in Jupe. The habit of flowering in very early spring, which most trees have, is unknown to very many peopie. If they wish to see beautifu! flowers they should visit the larches in April and May.

The wood is light colored, resinnus. coareo grained, very strong, and remarkably durable in contact with the soil. This quality makes it valuable for fence posts, telegraph and telephone poles and railway tics. It is much used for ships" knees and planks. It is adapted for door and window fram:and it does not shrink or warp. Shingles made of it are even more durable than those of pine wr cedar. It stands the effects of water for centuries. It is so strong that joints and rafters made of it
support incredibly heavy weights. A cubic foot of larch wood weighs 39 pounds. Although it is most common in swamps it grows freely in uplands and meadows where it attains its greatest size-from co to 80 feet in height, with a trunk diameter of two to three fect.

## The White Cedar.

The white cedar (Thuja occidentalis) attains its greatest size in swamps or wet grounds, but those symmetrical cone-shaped trees, so valued for their beauty, grow in light rocky situations, reaching their greatest perfection in limestone regions, especially abont the lower St. John and Kennebecasis rivers. The cedar is abundant in New Brunswick, somewhat scarce throughout Nova Scotia, and is said to be rare in Prince Edward Island. It attains its greatest size in northern New Bronswick, where it is frecpucntly seen of a height of fifty to sixty feet and with a trunk diameter of three feet or more. It has a fibrous stringy bark. Its wood is soft, light $i_{11}$ color. fine grained and very durable. It splits casily and is largely used for posts, shingles, fencing and railway ties. It will stand the weather for a great number of years without showing the slightest taint of decay. It is much used for making pails. tubs and for a variety of purposes where lightness is required. A cubic font weighs on!y 20 pounds. Its small scalc-like leaves grow in four ranks or $^{-}$ rows on the branchlets, forming fan-like sprays. This with the pyramidal habit of growth of the cedar makes it very desirable for lawns and hedges. It is the only member of the Cypress family found in this latitude.

The flowers of the cedar are not conspicuons. They grow on the eals of the branchlets, both kinds, sterile and fertile, on the same tree-the latter proslucing the broadly winged seeds in dry spreating cones.

In schooks where there may be objections to general readings from the Bible or repeating the Lord's prayer, this plan may be adopted for the morning exercises: One morning alternate readings of the lieatitutles (Blessed are the poor in Spirit) : on another concerning Charity (Though I speak with the tongues of men and of angels) : on another concerning Goll's care(The Lord is my Shepherd) ; and so on. Then a favorite hymm may be sung: followed by a memory gem that may be helpful for the day's work.

## Our Coasts. I.-Their Character.

## Proffasor L. W. Barley, LL. D.

Who is there who does not wish at times to go to the seashore? and who, once there, is not impressed by the conditions which distinguish it? The coolness of the atmosphere, so different from the prostrating heats of the interior; the refreshing breezes, with their pectuliar odour of iodine; the character of the scenery, with alternations of headland and bay, rocky bluff or sandy beach; the inrolling of the waves, followed by their rhythmical but inevitable retreat; the submergence by the in-
easy reach of it have a source of enjoyment of which those who are debarred from such scenes can have no real appreciation.

But the interest of the sea coast by no means ends with the mere affording of pleasure to those who visit it. It is a most important factor in determining the characteristics of the country which possesses it. Its presence and extent greatly influence the character and climate of the adjoining region; from it are derived the supplies of moisture necessary for the maintenance of its drainage system; through its indentations harbors are determined; by these harbors are fixed the location of its ports


SOUTHERN CROSS. GRAND MANAN. N, B.
flowing tide of all objects within its reach, and the laying bare of extensive flas as the wat. is recede: the waving to and fro of the green and purple seaweeds as the currents sweep around the rocks to which they are attached: the sight of sea-urchins and star-fishes clinging to or crawling over these same rocks; or, where tidal pools remain, of seaanemones expanding their feelers, in form and color recalling the petals of a chrysanthemann ; the gathering of brilliantly colored pebbles or of equally brilliantly tinted shells upon the beach -ail of these are attractions which few can resist and to most persons are a sinrce of the keenest delight. Poets, painters, litterateurs, all fint inspiration on the shores of old ocean, and those who live within
of entry and export; it determines the occupation and characteristics of a considerable percentage of the population: with it in short are linked nearlv all the phases of a conntry's history, the extent and rapidity of its development, its relations to other nations and its position in the scale of civilization. One has only to refer to such countries as Greece in classical times or England and Japan in their modern days, and to contrast the latter with Russia, to see how vast are the consequences depending upon the extent and nature of a country's sea-board. Let us now see how far such connections find illustration in the Naritime Provinces of Canada.

Bounded upon two of its sides almost wholly, and upon a third partially, by bays or arme of the sea,

"SAVED" Froma a 'rinting hy sir Fitwin f.amdscer.

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Digitized by Microsoft ${ }^{(8)}$
the extent of the New Brunswick coast is, for the size of the province, very large, there being. except for the break at Chignecto a continuous coast line of over seven hundred miles, or about one mile of coast to every thirty-eight square miles of surface. Nova Scotia upon the other hand, except for the same break, is everywhere surrounded with water, the length of coast in comparison with the consolidated area being further increased by the great indentations of Minas Basin, Annapolis Basin and St Mary's Bay, as well as by the extreme irregularity of the southern sea-board, and the occurrences of such transverse gaps as those of Digby Gut, the Grande and Petite Passages and the Gut of Canso. The number of islands adjacent to the coast, comparatively few in New Brunswick and almost countless in Nova Scotia, help to make numerical comparisons between the two very difficult.

With such an extent of coast line possessed by Acadia it would reasonably be expected that in the special features of the sea-board, considerable diversity should be manifested. And this is actually the case. Thus in Now Brunswick we have a natural division into two sections, that of the Bay of Fundy and that commonly known as the "North Shore": and between then the contrast is very marked. The latter is for the most part low, the adjacent waters are shallow and often shut in by sand bars, but possessing nevertheless many fair harbors, usually expansions of large streams, like the Niramichi and Nepisiquit, which here debouche to the eastward. Owing to the lowness of the shores the scenery of the North coast is nsually tame and monotonous, though occasionally the carving acion


ISLAND OFF EAST COAST, N. B.
of the sea upon exposed bluffs may lead, as shown in the above cut. to interesting and pictureaque results The shallowness of the water. together with the slight amount of tidal morement, makes
the waters in the summer season comparatively warm and to be sought for bathing purposes at many summer resorts, while, for the same reason, during much of the winter, the shore is much en-


CLIFI. MAHOGANI ISLAND, NEAK SI. JOHN.
cumbered with ice, and navigation becomes impossible. The Bay of Fundy shore, upon the other hand. is generally bold and abrupt, bordered along much of its length by walls of rock, broken by but few indentations, while the neighboring waters, in addition to rapid descent in depth, are marked by the exceptional height and rapidity of their tidal flow. This shore has, however, the advantage over the other sea consts of the Province in being free from ice, the principal harbors, such as those of St. Andrew's, L'Etang, Musquash and St. John, being open at all seasons and in the most severe weather. Lpon this same coast is to be found scenery which is always picturesque, and, especially to the eastward of St. Johm, embracing elements of grandenr. This is partly due to the height and steepmess of the adjacent hills, which in eastern St. John county rise abruptly to elevations of eight lundred or nine humdred feet, and partly to sea sculpture. the result of the wearing action of the sea upon rucks of different degrees of hardness and varionsly disposed.

In Cirand Nanan we have a combination of both features, the western and morthern sides of the island presenting almost continuons and precipitous bluffs, about four humelred feet high, while in places, as about the Sonthern Head, they have been carved by the sea into most curious and fantastic forms.
l'assing to Nova Scotia comtrasts equally remark-
able attract attention. Along the Gulf coast, a continuation of that of the New Brunswick "north shore," the features are much the same, the shores of the mainland being generally low, the waters shallow, and the harbors, of which Picton is the most important, apt to be closed for some months by ice. Upon the Bay of Fundy coast the distinctive features are a rock-bound shore, overlooked by steep and sometimes, as at Cape Split and Blomidon, by lofty and precipitous bluffs ; few indentations ex-


KOCKS AT HOPEWELL CAPE, N, B,
cept at its head; deep water which is permanently open: few islands; and extraordinary tidal flow. Finally, upon the Atlantic sealoary the features are markedly different from either of the above, the shore having a general direction which is quite uniform and parallel to that of the lisy of Fundy, but in detail exhibiting the greatest pussihle irregularity, partly due to innumerable long and narrow indentations. at right angles to the general trend of
the shore, and partly to innumerable islands. Through the former, as in the case of Halifax and Shelburne, are determined deep and commodious harbors; through the latter coastal navigation is made more difficult and dangerons, but at the same time fishing operations are enlarged and facilitated. Cape Breton, as an island, has distinctive features of its own, the most important, in the present connection, being the narrowness of the passage, the Gut of Canso, by which it is separated from the rest of the province, the character and position of Sydney Harbor in relation to the great coal and iron industries, and the almost complete division of the island into two by the chain of the Bras d'()r Lakes now so famous for the beauty and grandeur of their scenery.

In the next chapter we shall consider some of the processes in operation upon our coasts and thus pave the way for a better understanding of the causes which have determined their distinctive characteristics.
\{Several of the illustrations used above were kindly loaned by the New Brunswick Tourist Association].

A young business man of New York, who has not long been married, was fondly greeted by his wife one evening with the joyful announcement that she had that afternoon received a diploma from the cooking school at which she had been an assiduous student.

Evidently the husband did not exhibit that cegree of enthusiasm in the matter that she expected for the young wife said, in a disappointed tone: " Aren't you glad that I have been enrolled as a competent cook? Just see, I've prepared this whole dimer ! I gave especial attention to this dish here Guess what it is!" As she spoke the husband had endeavored to masticate a particularly tough piece of the contents of the dish referred to. Seeing his loak of wonder, the young wife again playfully said, "Guess what it is?"
"I don't know," responded the husband, uncertainly. Is it the diploma ?"-Harper's Weekly.

King Christian IN. of Denmark, father of Queen Alexandra. is dead after a reign of 43 years, and his successor, Frederick \III.. has quirietly ascended the throne.

## Notes on English Literature.

By (. K. K. Butler, M. A., Hatifax.
Washington Irving's "Christmas Eve."
P. 86, 1. 2.- What is the word commonly used b. us equivalent to "chaise" ? "Postboy," what place did he occupy, as a seat? The custom is still kept ${ }^{u}$ p in royal processions etc. 1. 6.-"Goo 1 cheer" 's a common phrase in poetry, etc. What is its meaning ?

In Horatius Alacaulay writes: "What noble Lucumo comes next to taste our Roman cheer." 1. 7.-What is the meaning of a "bigoted devotee"? Also of "the old school"? 1. 9.-What does "tolerable" mean in this line? What is its usual meaning? 1. 10.-The old English comitry gentieman of an earlier date is pictured in Sir Roger de Coverley. Those who have'nt read about him have missed a fine piece of word painting: 1. 11. et. seq.-What the writer says here is even more true of the present time.
P. 87. 1. 3.-Chesterfield the noted criterion "if good manners, etc., lived during the 18 th century The encounters between him and Samuel Johnson are famous in the history of the latter. What is the meaning of the expression "took honest Peachann for his text book": 1. y.-Meaning of phrase "deeply read"! 1. 11.-To what time would the writers of "two centuries since" belong? Name some of the more fanous of them. 1. 1.4.-"The golde" age" is always some time ago with tho ie who are not exact in their knowledge of present and past conditions. 1. 17.-Meaning of "gentry"? Give another word in more common use. 1. 19."Indulging the bent of his humour" means what? What is meaning of "bent": 1. 20.-What is meaning of "old" as applied to a family: 1. 24. "Immemorial" means what? $/ n$ or im at "he begiming of a word has what force usually? 1. 26.Look up the derivation of eccemtricitics." 1. 32."What is meant by the "family crest ?"

1'. 88.1 . 7 et. seq.-How al.ont the wife left bolind alone while the husband goes merrymakin? Why didn't she go too? What kind of trees was the avenue formed of? 1. 19.-Wiond thare be vapour on such a night in onr climate? What figure of speech in the word "shroud"? 1. 20-Loxik ul derivation of "transport." is it nsed here in its literal sense or otherwise? 1. 22.-Evidently his companion had attended one of what are called in

England the "public schools." What wont we call them here ? 1, 24.-Find derivation of filial. 1. 25.-"Scrupulous" means what ? 1. 32-Find meaning of "pedant". How does it differ from "scholar"?
P. 89. 1. 18.-How came the taste of Charles Il.'s time to have a Firench tinge? What was the date of the Restoration: What other historical event is, spelled with R. 1. 25.-Find meaning of "obsolete." 1. 28.-"Old family style" ; with which word does "old" go as an adj. "family or "style"? 1. 3o.What is the difference between "republican" and "monarchical" form of govermment? 1.31-When did the party called "Levellers" exist ?

1. yo. 1. 2.-The yew-tree wood was formerly used for a certain purpose. What was it? 1s. 9 and 1o.- In Engiand the Christmas festivities extend over twelve days finishing with "Twelfth night" celebratio ro. 1. 15.-Explain the chstom of "hanging the mistletoe." What kind of a plant is the mistletoe; i. e. how does it grow? 1. 26.-. Meaning of "whim." Find derivation of "benerolence." 1.34 . -What is a "superamuated spinster?" And a "half-tledged stripling"?

1'. 91. I. 10.-Meaning and derivation of primitive? 1s. 12 to 20 . The hall of Abbotsford gave Scot a great deal of pleasure in its furnishing as may be seen in his "1ife". 1. 17.-1i the furniture was "cumbroms" it at least possessed ome merit. What was it: 1. 2()--" Yinte clog" is more commonly known as "Y'ule log" 1 30-.- Hereditary" may have its derivation fomm. 1. 32.-What part of specech is "rery" here:

1'. 92. 1. 2.-"(avalier" may here have a political meanity. If so what is it: 1. f. What is the meanisg of word "sippere" liere? What do ree understand by it? After the supper the writer hat eaten we would not have been athomished had he seen visions or at least dreaned dreams. I. 21.Those who have read delfison may remember a person whe somewhat resembles laster Simon. 1. 3o.-. Meaning of "harping?
P. 93. 1. 2.-Ntenine of "caricature"? 1. 3.What figure of specel in "were reaty to die with fanghag"? 1. 7.-Whe apply "ravant" to come: ?
 Neaning of "jumpiner with his humnor"?
 мр "antiphated" and "ontique". 1. az.- Meming of "prone?" Derivation? 1. 35-The officer being still young and having leen wrunded at Waterlom.
this piece must have been written not laser than? When was Waterloo?
l. 95-Wherrick, a clergyman, lived from 1591 1674.
P. 96.-Study the following worls:- Noscgav. ponderous, panelled, cornice, grotesquic, tester, niche, casement, aerial.

## The School from the Standpoint of a Parent.

S. D. Scott, Editor of the "Sun," St. John.<br>(Read before the St John and Charlotte Counties United Teachers* Institute, Uctober, 1905.1

One feels with such a theme assigned him, as if he appeared, to speak for the great body of parents in the jurisdiction of this Institutc. I do not speak for more than two at the most. In fact it would be safer to say that only one is represented in the few well chosen words that may come from me.

And in the first place let me testify to the faithfulness, patience, capacity, and efficiency of the teachers as I have come to know of them and their work through my own relation to the school. Any person living in a house with about half a dozen normal, healthy children, whose goodness does nit make them unfit for earth, may dimly realize what fine selfcontrol, 'what skilful generalship, what gifts of heart and mind and body are required to keep in fair working order taree or four dozen such children in different dispositions, of various capacities of divers home habits and miscellaneous at ainments; to carry them along together in some regular organized course of training up to another plane of intellectual development. Such knowledge and skill is too wonderful for me; I carnot zitain to i.. My own expe"ience as a pubie te.echet is limited to the i..struction of some ten independent feeling lads for half an hour a day in a Sunday school. If I had imagination sufficient to picture what it would be like to have charge of three or four times as many such boys, five or six hours a day, five days in the week, I would undertake to rival Dante-at least as to two thirds of his Divine Comedy. Once in a rasi moment when asked what I would take and teach school I made the hasty and inconsiderate reply that I would take a schon within my capacity for $\$ 200$ a day. If Alark Twain will allow, it is one of my life long regrets that 1 did not make it $\$+50$.

Well there is before me a more heonic breed-

[^7]Personally I know a few of you who seem when we meet to have no hero's crown, or martyr's halo incommoding your brows. lint thinking of you dll day long with two or three score children in a room, trying to keep them all interested, and serenely going about it the next day, and the next, I know that the true teacher is born not made. There are doubtless some who teach for revenue only. But these, I should think, must be of all men and women most miscrable : and all people who do things for revenue only are miserable enough.

The city has many advantages over the country in the matter of schools. But in some respects we of the town are losers. We hardly know the teachers of our own ciaidren. The visible relation between parent and teacher is not such as one would expect, whether we regard the teacher as a partner with the parents in the task of training the child, or as a professional person retained to perform a service, or even as an employee engaged by the year with a regular task. It would not surprise me to learn of some father who consults less witin the instructor of his boys, than be does with the man who makes his cuats: or that some motiers spend more hours with their dressmakers than with the teachers of their girls, and show more anxiety about the quality of theci milliner's work than they do about the school training of their family. I am sure that the work of the lired man on the farm, and the cook in the kitchen is studied more closely by the men and women who pay for it than the work of the teadhers who have control of half the active hours of the young members of the family during the eight or ten years in which their characters are under construction. Perlaps it may be claimed that the teacher is no a hired help requiring supervision, but a professional man or woman, performing technical work, thoronghly qualified to do it, and inspected by other and better experts. We know that this witness is true. Teachers belong to the learned professions if any one does. But when the doctor is in attendance on our families we usually seem to be quite interested in lis proceedings, and talk over the situation with a certain serioustiess. The pastor is not supposel to be in right relations with his flock if he and they do not confer on matters in his field of operations. Those citizens who employ a lawyer take some care to go over the case with him. But how is it between parents and teachers? Speaking for city parents I might make some sort of general confession. But what's the good. Everybody knows.

In the country sclools the teacher is brought into
muoh closer relation with the families whose interest she serves. Ten to twenty households comprise the whole community concerned, and that is an easy field for a young and acive person to conquer. She is able to talk over with every father and mother the capabilities, attainments and progress of each child. It calls for tact and judgment, patience and good humor, and sometimes for disagreeable frankiness. It is often lard for the teachers to keep clear of the local and family controversies and jealousies. But 1 ann sure that the more intimate relationship that grows up between teachers and households in the country is, in the case of at trat teacher, of great advantage on both sides.

But the city teacher has usually twice, and often three or four times as many pupils as the one in the country. They belong to five or ten times as many families, since the system of grading divides the same fanily among many roms. A group of five like my own, brought up in the country in an ungraded school, would perhaps at their presen age have known four or five teachers. In some happe hamlets they would have known bat one. Living here, I believe they have already beell under the cate of thirty-seven different men and women, and the number will prohably reach sixty before they are through. That complicates the problem.

In the more scattered and poorer commtry districts the teacher is the only public functionary. She comes in from high sclrool, nomal school, or college. "trailing clouds of glory" and sle may be the strongest influence for eulture there is in the place. . Wost of the teachers of this city are working in the community where they were born and grew up. They certainly form a part of the intellectual life of the whole place. But if the head of the family knows a few of these one humdred and fifty teachers, the chances are that they will mot be the ones in charge of his own chitlren. * * * * * . Is regrach some, at least, of the trustess, who are supposed to represent the parents in the control of the sehools, they consider their work at an end where it
 teacher enga.e 1 , and ti.e materine: $y$ set in mon tion 1 their way they are like the deity of some far eastern creeds, who makes his workd and sets it in monion and then betakes himself to a solitary throme and lets it go.

*     *         * (One schond tristee I knew, who served in an incorporated town. He was a busy lawyer, an 1 once told me that he fomb his work as truster rather exacting. Ihe feh that he onght to visit each depart-
ment in the scliool every week, and to stay long enough to go over the lessons with the classes. In the higher and lower grades alike he followed all the text book work, and he casually remarked that it took more time than one would suppose to read carefully all the Greek, Latin and French lessons and exercises of the higher classes, and to work out algebra and geometry so that he would know exactly what they were doing, and be able to examine and criticize the work of any class as it came up. Now this man did not think that he was doing more than was in his contract when he accepted office from those parents whom he represented. He did not tinink that a school trustec was a mere hewer of wood and payer of water taxes.

I seem to have made quite an excursion from the subject, to show that the teacher has not the direct responsibility of the parent, which an ordinary employee has to the person for whom he works, and that the does not have the in imate personal relation with the heads of the families which exists between lawyer and cliem, doctor and patient, or preacher and parishioner, whereby the value of the work of each of these professional men is tested; and finally. that there is little or no representative influence or supervision exercised by tile parents through the school board. It remains that the teacher can hardl) louk for approval, or criticism, or conctemation of his work to the people of the community where he lives. He knows the inspector and superintendent ot schoo's as the authority whom his work must be commended. The only authority as to the courses of study is a provincial board from which also comes the anthority to teach, and a certain proportion of the salary: If these are satisfied there is no one else to deal with. If they condemm, it would not avail though the parents of all the chiblren in the class fornd the teacher an angel from heaven.

Sicieties used to debate whe:her hope of reward or fear of punisiment counted for most in regulating the life. lint the commmity of parents can offer neither inducement to the teachers. His work is little reangized by those for whom it is done, for the children do not moderstand, the parents do not know, and the trusteses are concerned with other things. It must be clifficult for a sulkordinate teachor in titese schools, even though she be a genius, to got herself disoovered and to oltain her fair meed oi praise. Yet she has a right to expect this much, in siew of the limited material rewards.

[^8]Some few great souls among teachers have been known, one or two I have myself seen, whose work so absorbed them that they cared, or seemed to care, little for recognition. It was enough for them to do the thing. If they spoke of themselves they might give in other terms the explanation of that State governor who said: "I seen my duty and I done it."
"These demand not that the things without them Yield them love, amusement, sympathy.
"Bounded by themselves and unregardful
In what state God's other works may be,
In their own task all their powers pouring,
These attais the mighty life you see."
(Concluded in next number.):

## ART NOTES - No. III. <br> By Hunter Boyd, Wawelg, N. B.

The topic chosen for the month will appeal readily to all grades of scholars, and not least to those in the primary departments. Most children enjoy pictures of children, and also of animals, and particularly when these elements are so combined as to tell a story. For this reason one often meets reproductions of the well known picture by G. A. Holmes, called "Can't You Talk ?" or another by C. Burton Barber "In Disgrace." Hardly less enjoyment is derived from scenes where only animals are introduced, provided "something is going on," and it may be well to recall the picture by H. Sperling, of Berlin, which bears a title "Saved" identical with that of Landseer's which is reproduced this month. It will be remembered that in the Berlin picture a kitten, attacked by two dogs has found a place of refuge at the breast of a larger dog. These two pictures may be compared chiefly for the purpose of noting the emotional expression of the two rescuers. and it would be well to gather other specimens of pictures where Newfoundland or St. Bernard dogs have effected rescues.

The meaning, or message of Landseer's 'Saved' is so obvious that we can afford to use this picture as a basis for classification of artists and their work, at any rate so far as such a summary will cnable us to place 'Landseer," and to know precisely what we are entitled to look for in his work. We all know the saying, "the eye sees only that which it brings with it the power of secing," and it is true of artists just as $i$ it is true of the public who examine their work. A person who knows landseer's specialty will not examine too closely his treatment of the clourls. the appearance of the occan, nor even the
treatment of the little child. The strong point in the composition is the head of the dog, and if any question remains to be asked it is "What is the dog saying ?" or more exactly "What emotion is, expressed by the dog?" This is not the same as the quality of character or conduct displayed by the dog. We should all reply doubtless that we see faithfulness, kindness, humaneness and so on. But our business is rather to discover what were the feelings imputed by Landseer, or observed by Landseer, in this dog at the moment selected for his picture. If he actually witnessed a dog in this condition has he succeeded in making us sharers of his own emotion experienced when he reached that scene? What is the nature of the appeal which the animal makes upon ourselves as we contemplate this reproduction in black and white? Can we hear the dog, and if so what is the nature of the sound emitted. When we are thus led into the actual life of the dog all questions as to time of dlay or year and the location of the wharf or even the identity of the child are seen to be comparatively unimportant.

Many persons who are not conversant with the characteristics of various artists are frequently provoked to be told that such and such pictures are "good." They fail to discern that there are many kinds of "good" and not many artists achieve success in more than two or three special lines. It would be well for the scholars to be encouraged to form collections of pictures by animal painters. They can be classified according to nationality or according to the nature of the animal preferred. Let us take the French artists to begin with and we have Madame Rosa Bonheur who painted all animals but excelled with horses and oxen. Then we have Constant Troyon one of the greatest of French painters of landscape and animals. He made provision for a l'arisian scholarship for young painters of animals. Next we take E. Van Marcke, Charles Jacque, Brascassat, and Madame Henriette Ronner so famons with her cat studies.

For those who can afford to procure works for their school, or who have access to public libraries we commend "Animal Painters of England" from the year 1650. by Sir Watter Gilbey, Bart., and they will there find nearly 60 illustrations by W. Barrand. J. F. Herring, and pictures by the Coopers, although not including the beautiful work of the recently dectased T. Sidney Cooper, R. A. Any of the great artist series of publications will include a life of Sir Edwin Landseer, and illustrations of his chief works. Sets of pietures can easily be obtain-
ed from the Brown, Perry, or Cosmos Picture Companies.

It may suffice to add that Landseer lived $1802-$ 1873. He enjoyed the friendship of Prince Albert and Sir Walter Scott. He belonged to an artistic family and was unusually precocious. He was not a great colorist and thus the reproduction here presented does wot greatly depart from the value of the original. Richard Muther says of him "He paints the human temperament beneath the animal mask."

This plan is useful for one hour's entertainment Friday evening as well as for an exercise in geography. One week I write fifty or more names on the blackboard of the most prominent cities. capes, bays, etc., of the world. Have pupils copy into their exercise books. Then during their spare time, either in school or at home, they locate their places, writing the location neatly opposite each name. When I have spare time, if there be any trouble in finding places, I help them out, making constant use of maps, thus slowing my interest in the subject.

On Friday evening we appoint captains who choose sides. I give out the names as in a spelling matoh. When one is missed the seat is taken. (I'upits point out place on map.) The side that remains longer on the floor or which has the greater number standing when names ate all catled out, is pronounced victorious. To vary the exercise, I have pupils tell some interesting fact in comection with each place. The names written are chosen according to the capacity of the pupils, and thus a pleasant as well as useful exercise is given. The pupils become very much interested and are made familiar with the maps, also are made familiar with the names of places and their location, so that in ordinary conversation and reading they are much benefited.--Popular Educalor.

Niss Ella Crandall, of Wolfville, one of the first contingent of Canadian teackers to go to South Africa, has arrived at the home of her father. Rev. D. W. Crandall, to spend a few weeks' vacation after whicis she will return to Winburg. where she has a position in the large govermment solmon of twelve teachers. Nearly all the other Canadian teachers who went out at that time are either married or have returned home.-Yarmoulh Telegram.

If you strike a pupit be excectingly careful how, when, and why you do it. The pullic is tou semsitive for a teacher to take chances.-DEX.

Dear Editor.-Those who had the pleasure of reading in the November number of the Review Rev. Mr. Boyd's interesting note on Turner's painting, "The Old Téméraire," may find an added pleasure in Henry Newbolt's lines entitled, "The Fighting Téméraire." A copy of the poem is subjoined.

Yours sincerely,
Dalhourie College, November 3. D. A. Murray.

## The Fighting Temeraire.

11 was eight bells ringing. For the morning watcls was done, And the gumer's lads were singing, As they polished every gim.
It was eigh beils ringing,
And the gunner's lads were singing, For the ship the rode a-swinging, As they polished every gun.

On! to sce the linstock lighting, Téméraire! Téméraire! Oh: to hear the round-shot biting.
Ténéraire! Téméraire! Oh: to see the linstock lighting, - And to hear the round-shot biting. for suc're all in looe acthth fighting On the fighting Téméraire.
It was noontide ringing, And the battle just begru, When the ship her way was winging As they loaded every gun.
It was noontide ringing.
When lye ship, her way was winging,
Anif the gumer's lads were singing, As they loaded every gin.

There'll be many grim and gory. Tíncraire! Toméraire!
Theri'll be few to thl the story. Tômérairc! Tímérain:!
There'll be many grim and gery.
There'll be few to tell the story.
But we'll all be one in ghory I'ith the fighting Témerraire.

There's a far bell ringing
At the setting of the sim,
And a phantom wia winging.
Of the great days done.
There's a far hell ringing,
And a phantom voice is singing
Of renown forever clinging
To the great days done.
Now the sunset breazes shizer, Tíméraire! Tèméraire!
And she's fading dozen the rizer, Tênéraire! Tíméraire!
Noze the sunsit brewes shizer.
And she's fading doan the riter,
But in England's sumg foreter
She's the fighting Téméraire.

## A Hint Regarding the Provincial Examinations in Nova Scotia.

## The Editor of The Educational Review:

Sir-Last summer while reading answers to the questions in science of the provincial examinations in Nova Scotia I was frequently discouraged because so few of the teachers had apparently profited by articles which I had written for their special benefit. I had cudeavored to make plain some important principles and had given bints as to how they might be :mpressed upon the pupils who contemplated undergoing examination. I had hoped that these hints might be found useful, but the same old mistakes were repeated to such an extent as to indicate that the teachers had either not read my articles or had simply not thought it worth while to modify their teaching. This would seen a short sighted policy, even if the articles were not really of educative value, when the hints were given by the provincial examiner.

It has long been the aim of the Educational Departnent to improve the character of the science teaching in the schools, and examination papers are thoughtfully prepared with that object in view, and 1 have tried to further these efforts by occasional articles to your journal. I propose in this letter to make one more attempt to arouse the teachers. I have arranged that one of the questions on the papers in chemistry last July will be repeated, in substance at least, next July. Surely teachers reading this letter, who have pupils preparing for examination in chemistry, will take pains that they, at all cvents, thoroughly understand all the questions asked last July.

This warning having been given, it will be but fair that answers to this particular question should be more strictly marked than would otherwise be the case.

Joif Wadoell.

Do the following passages bear any traces of the latitude, season, or country in which they were writen?
"Twilight and evening bell,
And soon after the dark!"
"The sun's rim dips; the stars rush out:
At one strite comes the dark."
"The night cometh, when no man can work."
"The long gray fields at night."
"The dawn comes $u_{p}$, like thunder."
Introduction to Practical Geography.

## Barbizon.

MISS A. MACLEAN.
To the public school teachers $i_{11}$ my native land, who know no more about art than I used to know, I should like to write of art. There are hundreds such. Bright, educated, clever teachers there are to whom the lives of the heroes of the battle field, of the giant souls who struggled for civil and political freedom, of the God loved ones who livel and suffered and died for the right to serve God as they thought best, are well known, but how many hnow the lives and works of the heroes, the cosquerors, the martyrs of the art life, or realize that they are as worthy of thought and study as the people of any other field of the world's activity? We have no knowledge of a sixth sense, but if we could beconse possessed of a sixth sense, we would surely say regretfully, "what we have missed in the years that are past!" I know how much it would have meant to me lad someone talked to me 'in school as I would like now to talk to the pupils 1 have known. I can not do that, but if 1 can help teachers to interest their pupils in art and the lives and works of artists, I shall feel that I have made some atonement for what my pupils missed because 1 did not know.

Once I was employed to give a young !ads: whose education had been neglected, instruction in history and literature. The first day 1 called 1 was shown into a finely furnished library, where sat a graccful young lady by a table on which were two huge volumes, the leaves of one of which she was disconsolately turning over. When we were left alone, she turned to me and said, "How in the world do they ever suppose I can learn all that!" I took up the book at which she pointed, and found its title to be "Twenty Centuries of History." The other book I found to be an equally ponderous and alarming dissertation on literature. I was not surprised that the poor girl was frightened. Well, she had no lessons out of cither book with me. I hact my own methods and they succeeded. We have more than twenty centuries of art history-art is as old as the existence of man upon the earth. I do not purpose going back now to the Cave Dwellers or the River Drift Men, the Kitchen Middens or Stonehenge. I wish to journey now with the teachers and by them with their pupils in sumner times ar 1 with people nearer to us in time and interest. If later they should wish to journey back through the
long ago, I shall be glad to go with them. We will begin with Barbizon.

What was Barbizon? Far away in sumny France, in the early part of last century, on the edge of a vast plain, close to the side of a forest, was a village of a single street. The houses or homesteads which formed the street were built around courts. Into these courts was thrown the refuse from the stables, there the cows were milked and the poultry fed, there pigeons cooed and little children played There was no access to this one street town except by travelling across the fields from the post town if Chailley, a mile away, or by a path through the forest in another direction. This little hamlet, or day's walk from Paris, was Barbizon, and the forest, i!p to which it seemed to nestle, was l'ontainebleat, to whose Renaissance Chateau came often Kings of France and their courts, and among whose lovely, sumlit glades and shady paths men and women whose names are linked with history joynons! rambled. There were many hamlets and villages on the plain, vineclad hones of men and women who sowed and reaped, and g!eaned and drove their sheep and cattle to pasture and watched them by day and by mixht. Nany of those villages were fairer than Larbizon; then why is it that litle Barbizon is known all over the civilized world toalay? It is because in that little hamlet, between 1830 and 1845 there gathered the largest number of men powerful in art creation that has ever gathered anywhere since the days of Michnel Angelo, the days oi the Renaissance. What men those men of the Barbizon school were!-Millet. Corot, Baryé, Rousseau. Gerone, Delacroix, Diaz, Dupré, Troyon, and many others. Strange that there should be long years when the world's eves ache with looking for its art lights, and then suddenty there is flung out against the blue a whole galaxy of brilliant stars.
It is said that harbizon became known to the art world through Claud Aligny and Philipe Le Dien. They had gone to Fontaincblean to visit a friend. and while there went into the forst looking for something to paint. By might-fall they had lost themselves, but by following the tink!ing of a bell they came upon a cowherd who guided them sut to the village of Barbizon and to the house of a peasant mamed (iame. Ganne could provide fond but not lodging, so the cowlered let them pass the night on the straw with his cattle. Next morning they explored the forest near the hamlet and were
so amazed and delighted that they insisted that Game should take them as lodgers. He and his wife decided that money was not to be despised, so they gave up, their bedroom to the artists, and shared the barn with the cattle in the pleasant summer time.

Le Dien and Aligny spread the news of their ciscovery of a bit of unspoiled nature so near to Paris, and next summer the place was overrun by artists. Finally Gante bought a large barn and fitted it up as a two-storey hotel with studios on the porth side. On the ground floor was an immense diming-hall, a cate and billiard table. Nost of :he artists gathered into Came's hotel and often it was so full that some slept on the tables and others in the barn. Between 1830 and 1860 nearly every French artist and representative artist from every other civilized nation visited Barbizon.

A merry "vie de Boheme" the men of the earlier liarbizon days led. Each season one was chosen as leader, and times were grave or gay according to the temperament of the leader. They were earnest workers. The law of the place was to rise car!? and the most diligent were off to the forest by five. After dimer they relaxed. Then they smoked. they talked. they sang, they decorated the panels of the dining-room, they went masquerading to the other villages or danced the bottle dance on festive occasions in a barn lit up by candles in tin lanterns and decorated with iry. The graver ones of Millet's type did the decorating, while the gayer onces of Corot's type led the bottle dance. Bottles were plated at equal distances from each other and the dancers, moving slowly at first, then fast and faster passed out and in between the bottles-he who tipped over a bottle was out of the dance.

Most of the artists came and went. but, during the bast twenty-seven years of his life, Marbizon was home to Millet alf the year round. and with Millet I shall begin sketclies of the lives and works of somice of the trost impontant of the Barbizon school c.f artists.

The purely educational value of nature study is in its power to add to our capacity of appreciation -onir love and enjoyment of all open-air objects. I should not try directly to teach young people to love nature so much as I shoukd aim to bring nature and them together, and let an molentanding and intinacy spring up between them.-Sohn Burroughs.

## February Birthdays.

February 3, 1811. Horace Greeley born; took an active part in the labour of the New Hampshice farm where he was brought up. He early learned to read and before he was ten had read every book that ine could borrow in the neighborhood. Estabhshed the New York Morning Post, the first pemny daily ever published, afterwards founded the New York Tribune, which he edited till his death.

February 6, 1664. Queen Amne of England, the last sovereign of the Stuart line, born in London. She was the second daughter of James II. She was the mother of seventeen children all of whom died in infancy before she became quecn. Her reign was distinguished by successful wars fought under the great Duke of Marlborough, and is also called the Augustan period of English literature, from the famous writers who lived in her reign.

February 7, 1812. Charles Dickens, one of Enyland's greatest nove'ists, born near Portsmouth. Bega: to study law but disliked it and entered upon newspaper work. His "Posthumous Papers of ake Pickwick Club," unequalled in their particular vein of humour, won him great popularity. His masterpiece is "David Copperfield," which is said to be the history of his own life. His "Child's History of England," "Christmas Carols" and parts of his novels are delightful reading for the young.

February ir, 1847. Thomas Alva Edison, great inventor, born in Ohio. His mother, a Scoteh woman of intellectual attaiments, taught him to read. He began life as a trainboy on the Grand Trumk Kailway; learned telegraphy and soon began a series of inventions, which mate his name famons. chiefly telegraphic and electric instruments, the telephone. phonograph, electric light and electric engine.
February 12, 1800. Abraham lincoln, the sixteenth president of the ('nited States, born in a cal)in in Kentucky, a grand-nephew of Daniel Boone. Had one year's schooling, was a farm laborer, "railsplitter" and trader by turns as he grew up. He was famous for his height and strength of body. his inex!austible fund of ancedotes, and for his cleverness in speech-making. (In a voyage to New Orieans he saw slaves chained, maltreated and whipped, which led to his deep-routed dislike of slavery. Studied law. was eleeted to Congress in 1846, and became president of the ['nited States in i860. He was assassinated by John Wilkes Booth. an actor, in 1865.
February ${ }^{15}, 1564$. Calilen (accent on the e) was born in Italy. A noted mathematician and phitomen-
pher. Invented the microscope and telescope. With the latter he detected the mountainous character of the moon, the phases of the planet Venus, discovered the moons of Jupiter, the rings of Saturn, the rotation of the sun on its axis by means of the spots on its disk. He was denounced as a heretic for teaching that the earth moves; was imprisoned and renounced what he had taught; but added an aside-"Still, it does move."
February 19, 1473. Nicolas Copernicus, an astronomer, born in Poland. He was the first to teach that the planets revolve round the sun, a theory that was rejected in his time.

February 22, 1819. James Russell Lowell, a distinguished poet and critic, born at Cambridge, Massachusetts.

February 22, 1732. George Washington, soldisr and statesman, the leader of the forces of theAmerican Colonies in the war of the Revolution. First president of the United States.

February 23, 1685. George Frederick Handel, great musical composer, borm in Saxony, composed sonatas at the age of ten, devoted himself to sacred music. Composed the oratorios of "Saul" and the "Messiah."
February 26, 1802. Victor Hugo, a celebrated lyric poet and novelist, also a great political orator and leader, born at Besancon. His greatest novels are "Les Miserables" and "The Toilers of the Sea"

Febrnary 27, 1807. Henry Wadsworth Longfellow was born at Portland, Maine; an eminent American poet ; was professor of modern languages and literature in Harvard Cniversity. Among his best poems are "Hyperion," "Voices of the Night," "Evangeline."

February 28, 1533 . Michael Montaigne, celebrated philosopher and essayist, born in l'erigorle, in France ; studied and practised law. His famous essays, which have passed through nearly one hundrea editions, have greatly influenced taste and opinion in Europe.

February 29. 1792. Gioacchino Rossini, a famons composer, born in Ita!y; at 14 years of age he could sing any piece of music at sight; at is he wrote the operetta "Tancredi" which within three years was played in every musical theatre in Europe and America. His master-piece is "William Tell."

The population of Canada is now over six nillions. The immigration figures for the year igo5 were somewhere near 145,000 or about ten thousand more than in the preceding year.

## Problems in Arithmetic, Grade VIII.

G. K. Bither, M.A.

I. If the gain on an article is 20 per cent, and the discount 20 per cent, and the S. P. \$40. Find cost and marked price. Ans.-Cost, $\$ 33$ I-3; M. P., $\$ 50$.
2. Bought 12 dozen pairs of boots at $\$ 25$ a dozon. pay 30 per cent duty and gain to i-3 per cent, Find S. P. each. Ans.- $\mathbf{S}_{3}$.
3. Find simple interest on $\$ 375$. 60 from Nay is. 1900, to Oct. 12, 1905, at 6 1-2 per cent. Ans.$\$ 131.84$.
4. 8oom. bought at $\$ 1.25$ a meter. duty 20 pas cent, gain 20 per cent. Find selling price per yard. Ans.-\$1. 645 .
5. A can do a piece of work in 9 days. 1: in 12 diays; A works for 6 days. How long will it tahe $B$ to finish it? Ans.-4 days.
6. An agent sells 400 bbls. apples at $\$ 2.50$ Commission 5 per cent. Invests proceeds at 5 per cent commission. How meth does he invest? Ans.- $\$ 904.76$.
7. The weight of iron is 7.15 times as great as water. Find in lbs and a decimal the weight of a bar of iron 3 ft . long. 4 in. wide and 3 in. thick? Ans.-111,7i8 ths, or ifi ths. 11.5 oz .
8. Find the value of a pile of wood 50 ft . long. 12 ft. wide and 8 ft . high. at $\$ 3$ a cord. Ans.\$il2.50.
9. In + months the interest on $\$_{275}$ is $\$ 5.50$. Find the rate per cellt. . Ins.- (6) per cent.
10. Divide $\$ 250$ ammig 3 persons so that the third has $1-3$ of what the first two have, and the: first $1-2$ of what the second has. Aus.- $\$ 62.50$. \$125. \$12.50.
11. A romm $12 \mathrm{ft} . \times 15 \mathrm{ft}$. and 10 ft . is th be papered with paper 18 in. wide. 8 yards to roll amt 25 cents a robl. There are three windews cach quo and 2 doors 3x8. Find cost. Mns. $-\$ 2.19$ 2-3.
12. A cylinder is 10 in . in diameter, and 15 in . higl. How many gallons will it hold? Ars.4.24 gallons.
13. A cylinder is 20 decimeters in diameter, and ro decimeters high. How many gallons will it hold: Ins.- 691.466 gallons.
14. Find wotume of a come 20 in . high, and 15 in . in thameter? Ans.- 1178.1 culbic inches.
15. Find in acres etc. the area of a triangle Whose base is 300 yards, and height 600 yards? Ans.-6 acres, 95 rods, 6 yards, 2 feet and 36 inclies.

[^9]
## Literature in the Primary Grades.-II.

A little girl of ten years of age has made the following list of favorite books, unaided. says St. Vicholas Magazine. Our reaters will find it hard to make any improvements.-
"Tanglewood Tales," Nattramel Hawthorne.
"Household Book of Poetry;" Dana.
"Unele Remus," Joel Chandler Harris.
"The Jungle Book," Kipling.
"Scottian and English Ballads," Nimmo.
"History of Hamsibal," Abbott.
"History of Romuius," Abbott.
"Whe Pilgrim's Progress."
"Henoic Mallads," Montgomery.
"The Blue Foetry Book," Lang.
"Stories from Homer," Church.
"Stories from Virgil," Church.
"Hans Andersen's Fairy Tales."
"A Child's Ili,tory of England." Dickens.
"Fales of a Grandfatier," Scott.
"Greck Herocs," Kingsley.
"Wonder Book," Hawthorne-
To these may be added others, not selected by a child, but which every child will delight in:

Aliee's Adventures in Wonderland.
Robinson Crusoe.
Swiss Family Rebincon.
Kingsley's Witter labies.
Lamier's 13oy's King Arthur.
Lamb's Takes from Shakespeare
Ruskin' King of the Golden River.
Scudder:s Book of Folk Stories.
Faratry Tales :und Fablec.*
Storie; from English 1 listory.*
It may be said that those chideren of the first four grades in oter schoots who read these twenty books. or half of them, will have a passession that will tast through life. It will not be difficult to obtain them. They are everymhere: and are anong the world's less literature for children. Let a child read one or two of chem, and there will be an eager desire to reat the ohers ; they will go in cuest of such, as dill many of those famons men, mentioned in "February liirthays" of this number, when they were childfent.

When and where may such books as these lie read? During the first three or four grades of the primary course, when chiklren are beeming familiar with the primed page, their ambition on read something outside their school reaters-sometiming well worth reading-may be easily ronsed

[^10]and directed. In the earlier grades, while drilling on many senseless short sentences, the teacher may supply deficiencies and read, or tell, the fairy stories and myths always delightful to children. If these are not read or told to the children before the enthusiasm for the marvellous has abated, they will not be enjoyed later. "There is no one form of literary art so elementary as the fable, and no book so emphatically a child's first book in literature as one which gathers the fables most familiar to the cars of English-speaking people."

Moral instruction and character building may proceed insensibly with the use of fables. Truthfulness. patience, reverence, obedience, may all be taught vividly and in a wholesome manner from them: and when once put on the scent, young minds are eager to follow out and discover for themselves the purpose of the fables. Æsop's Fables, Andersen's Fairy Tales, Hawthorness Wonder Book, Kingsley's Water Babies always delight children if handled in the proper way. Of course only the simplest fables should be read or told to very young children. The first two books named above should be read in the third and fourth grades and the last two in the fourth and fifth grades.

Many short poems from our best writers for children should be used in all primary grades both for committing to memory and in the language exercises. The memory should have plenty to do in the early grades, when things learned are most easi'.y retained, and when good wholesome literature stored up in the memory will form a reserve fund that may be drawn upon later in life.

Keep on the blackboard some selection from the poets to be looked over every doy until it is thoroughly learned. It may be descriptive of the month, or some bird, or flower, or other natura! phenomenon, such as is found in this or other ntumbers of the Review:

I father fearing an earthquake in the region of lis home, sent two boys to a distant friend until the peril should be over. A few weeks after, the father received this letter from his friend:
"Please take your boys home, and send down the earthquake."

In Massachusetts 209 cities and towns pay for the transportation of school children and only 54 do not. Is not this a good argument for consolidation of schools?

## Recitations for Primary Grades.

 Shut the Door.Godfrey Gordon Gustavus Gore-
No doubt you have heard the name beforeWas a boy who would never shut the door.

The wind might whistle, the wind might roar, And teeth be aching and throats be sore; But still he never would shut the door.

His father would beg, his mother implore, "Godfrey Gordon Gustavus Gore, We really wish you would shut the door!"

When he walked forth, the folks would roar, "Godfrey Gordon Gustavus Gore,
Can't you remember to shut the door?"
They rigged out a shutter with sail and oar, And threatened to pack off Gustavus Gore On a voyage of penance to Singapore.

But he begged for mercy, and said, "No more! Pray do not send nre to Singapore On a shutter, and then I will shut the door!"
"You will?" said his pirents. Then keep on shore! But mind you do! for the plague is sore Of a fellow that would never slum the door, Godfrey Gordon Gustavus Gore."

## The Coming Man,

A pair of very chubby legs, Encased in scarlet hose;
A pair of litte stubby boots,
With rather doubtful toes;
A little kilt, a little coat-
Cut as a mother can-
And lo! before us stands in state
The future's "coming man".
His eyes perchance will read the stars, And search their unknown ways;
Perchance the human heart and soul Will open to their gaze:
Perchance their keen and flashing glance Will be a nation's light-
Those cyes that now are wistful hent. On some "big fellow's" kite.

Those hands-those little busy handsSo sticky small and brown;
Those hands whose only mission seeme
To pull all order down-
Who knows what hidden strength may be Within their tiny clasp.
Though now 'tis but a sugar-s'ick In sturdy hold they grasp?"

Ah! blessings on those little hands, Whose work is yet undone;
And blessings on those little feet. Whose race is yet unrun!
And blessings on the little brain That has not learned to plan!
Whate'er the future holds in store,
God bless the "coming man."
-Selected from Blackie's School Recitations.

## The Key to the Box.

"What would you do," said the little key To the teak-wood box, "except for me?"
The teak-wood box gave a gentle creak
To the little key; but it did not speak.
"I believe," said the key. "that I will hide In the crack, down there by the chimney side,
"So this proud oid box may see
How little it's worth except for me."
It was long, long afterwaras, in the crack They found the key, and they brought it back.

And it said, as it cluckled and laughed to itself.
"Now l'll be good to the brex on the slelf."
But the little key stopped with a shiver and shock,
For there was a bright new key in the lock.
And the old box said: "I am sorry, you see; But the place is filled. my porr little k'y:"

## The Child and the Snowflakes,

["he "snowflakes", from three to six little girls, shothl! he dressed in white, with gi rlands of ravelled white cotton or cotton batting continued to the hands. The bair shoul.t be concealed under white caps and the cye-brows powdered whit : They should stind in a row, the smallest in front, diagonally facing the andience, and should reciec and sing in concert, very softly and clearly.]

## Child:-

Pretty white flakes of falling sunw,
Whence do you come ath whither go?
Snozeflake:-
From our cloudland home we lave come to-day.

## Child:-

Pretty white flakes, you have run away

## Snoziflakes:-

That is true little girl,-beyond of doubt
The cloud door opened. and we slipper out.
Then, lest the sun should carry us back,
Swiftly we ran oier the wonderfisl track,
That leads from the sky straight down to earth,
Where in days gone by we had our birth.

Child:-
Were yon born on earth, little flakes of snow?
You have no wings to Hy-then how could you go
Way up to the clouds that seem so far,
And come back again-each a pretty white star?
Snowflakes:-
A part of the sea's blue waves were we, Rolling about so wild and free,
Till the sun bent down and dipped us up, And carried us off in his shining cup; The 11 each drop floated now low, now high, Till together we made a cloud in the sky.

And larger and stronger we grew till today We found the door open and ran away.
Swiftly we came from the sky's blue dome, Till we passed Jack Frost in his frozen home, And we touched the mist as it hurried by,
Till it seemed white stars from an icy sky.
Now here we are back on the earth once more.
A pretty white quilt to cover it o.er,
And to keep it warm till the airs of spring
Shall once more the grass and the blocsomes bring
Sing. (Tune: "Lightly Row.")
Pluttring down! Hutt'ring down!
On the branches bare and brown,
Over all, over all.
See the showflakes fall.
light as feallers in the air,
Dancing, tlancing, here and there;
Winter's bees, wimer's bees,
Swarm upon the trecs.
Stars of chow! stars of show!
Dropping to the earth below,
Form the sky, form the sky,
See the snow-sters fly.
Light as feathers in the air.
bancing, dancing here and there;
Winter's bees, wimter's bees,
Swarm upon the trees.
-.Idapted from Kellogg's "Mid Winter Exercise."

## Lesson on Snow.

A lesson on snow should precede the above. Snowflakes are gatherings of mintute particles of water vapour frozen in the upper regions of the atmosphere where the temperature is $32^{\circ}$ Fahrenheit, or below that. The particles arrange the thselves in geometrical shapes around a centre, assuming a six-sided shape. This may be represented by゙ taking three needles or splints of equal lengths and arranging them so that they will cross in the
centre with the points equidistant from each other. Very perfeot snowflakes that fall in still air will resemble these six radiating lines. To make this likeness complete put the lines upon the blackboard and feather them in artistic shapes making the tracings proceed from each line outward, nearly at right angles.

The lightness and regularity of snow crystals depend on the height of the atmosphere from which they descend as well as from the stillness of it. These conditions prevail in high latitudes. In temperate climates the winds and moister portions of the atmosphere through which the snowflakes fall tend to melt them or break them up, so that they are very seldom found in regular six-sided figures.
Very fine, lightly fallen snow occupies from ten to twenty times as much space as rain water. Gather up a tumbler or tin dipper full of this snow and let it melt in a warm room, and measure.

The boys and girls of British Columbia, the Pacific maritime province of the Dominion, are rarely out of sight of snow all the year round. Accumulated on the mountain tops it serves to feed, by its gradual melting, streams of running water which flow down the mountain sides through gorges or valleys. The city of Vancouver gets a fine supply of cool, delicious water all the year round through the Catalano Gorge, the upper extremity of which is in contact with the eternal snows of one of the high mountains north of that city. But in winter little or no snow falls in either of the cities of Vancouver or Victoria, where perpetual summer reigns and flowers bloom for nearly ten months of the year. But it is doubtful if the boys and girls there have as good a tinne as ours during the winters along the Atlantic coast where there is usually plenty of snow and ice for coasting skating, sleighing and other winter sports. Why is this when the cities of Vanconver and Victoria lie several degrees farther month than St. John and Halifax ?
In severe climates the show fall protects the plants from the severe frost. Last summer in Yarmouth a lady pointed to her beautiful flower garden and said to the writer: "A few months ago there was six feet of snow lying upon those treasures of mine protecting them from the cold winds and frost." And more-the particles of snow as they fall through the air and lay upon the ground gathered the particles of dust, and when the snow melted they washed all the dust into the soil to fertilize it.

## English Foik-Lore for February.

February fill dyke, he it black or be it white, But if it be white it's the better to like.
All the months of the year curse a fair Februeer. A February Spring is nol worth a pin.
If Candlemas Day (Fcb. 2) be fair and bright, Winter will have another flight;
But if Candlemas Day be clouds and rain,
Winter is gone and will not come again.
If February brings no rain,
'Tis neither good for grass nor grain.

## Jack Frost.

Jack Frost is the jollien Jack that I know; He hails from the place where the icicles grow, We can ride in a sleigh Or go skating all day (Saturday)
When, with nippers and freezers, he cometh our way.
Though be tingies my fingers and pinches my nose. And makes funny cramps in the ends of my toes,

I say, "Jack, come ahead; I have skates and a sled, And though you may sting me, my sports you have led." -Sclected and Adapted.
"I am at a loss to discover why trustees and teachers cannot and do not unite to beautify the school grounds, and to make the school premises as attractive as any in the section. Why should not the pupils and teacher unite to make the schoolroom beautiful, homelike, and cheerful ? The influence of surroundings is a factor not to be neglected in education. The softening of manners, the humanising of affections, the curbing of destructive propensities, the self-respect engendered by congenial and pleasant environment, are all permanent in their effects and follow the pupil throughout his career."-Inspector Allan Embury, Pecl, Ont.
[The winter is the time for trustees and teachers to unite and make their plans for cheerful and tidy school surroundings.-Editor.]

Stop means to cease from action. It does not mean to remain, to stay. We shonld not say He . stops at the hotcl, but He stays (or lieres) at the hotel.

Fill the blanks with stop, stay, or stayed.
I. We——at the spring to drink, but did not long.
2. She-_at my house two days.
3. -When you reacl the corner.
4. I will_with you as long as you need
me.
5. Do not-away long.

## The Three Nine's Puzzle.

According to the London Tit-Bits there was a cranky arithmetician in Athens who worried the philosopher Plato by his propositions. But, Plato devised a way of getting rid of him. When the crank one day proposed to inflict on him a lengtly oration, the philosopher cut him short with the remark (fide Tit-Bits): "Look here old chappie' (that is the nearest translation of the original Greek term of familiarity), "when you can bring me the solution of this little mystery of the three nines I shall be happy to listen to your treatise, and, in fact, record it on my phonograph for the benefit of posterity."

Plato then showed that 3 nines may be arranged so as to represent the number in, by putting them in the form of a fraction thus:

$$
\frac{9 \times 9}{9}=I I
$$

The puzzle he then propounded was, to so arrange the three nines that they would represent the number 20. It is said that the crank worked 9 years at it and then gave up the ghost. But it is easy cnongh provided you know how. Can any reader of the Review find the solution and send it to 115 for the next number?

The province of the Dominion of Canada with their area and population are:-

> Area Population.

Ontario . . . . . . . . . . . . 260,862
Quebec .. .. .. .. .. 351,873
Nova Sontia ........ 21,428 2,182,947

New Irrunswick . . . . . . 27,085
Manitoba . . . . . . . . . . 73.732
73.732
372,630
Г. E. Island . . . . . . . 2.18 4

Saskatchewan . . . . . . . . 250,650 $1,648,80)^{8}$
450.574
331.120 255.2 1 I
178.6.57
103.259 $91 . f^{50}$ $72,8+1$
The total population of the Dominion is now estimated at over $0,000,000$.

## Anatomy in Rhyme.

[^11]How many bones are in the arm?
The top has one; two in the forearm.
How many bones are in the wrist?
Eight, if none of them is missed.
How many bones in the palm of the hand?
Five in the palm, pray understand.
How many bones in the fingers, then?
Twelve bones, plus two and repcat again.
How many bones are in the hip?
One in each, where the femurs slip.
With sacrum and cocyx, too, to brace
And keep the pelvis all in place.
How many bones are in the thigh?
One in cach, and deep they lie.
How many bones are in the knee? One, the patella, plain to see.
How many bones are in the shin?
Two in each, and well bound in.
How :an:y bones in the ankle strong?
Seven in each, but none is long.
How many bones in the ball of the foot?
Five in each, as the palms were put.
How many bones in the tocs, all told?
Just twenty-eight, like the fingers hold.
There's a bone at the root of the tongue to add,
And sesamoids cight, to what you heve.
Now adding them all, 'tis plainly seen
That the total number is 214 ;
And in the month we clearly vicw
Teeth, upper and under, thirty-two.
-Chicago Record.

## Current Events

The sudden death of the Hon. Raymond Jrefontaine, Minister of Marine and Fisheries, which occurred in Paris on Christmas day, has been made the occasion of remarkable demonstrations of sympathy and friendship. Representatives of the 1 Ferench, liritish and Canadian governments were present at the funeral ceremonies in Paris; and fifteen thonsand French troops under arms took part in the ceremonies. At Cherbourg, the remains of the late minister were received on board the British battleship Dominion, sent by the British government to bring them to Canada. The selection of the Domimion, one of the newest and largest ships of the British navy, for this service, probably suggestefl by the fact that she was named in honor of Canadla, was in itself a great honor. On her arrival at Italifax, a funcral train was waiting to convey the dead to Montreal, where the interment took place on the 25 th, with full military honms.

The elections to parliament in the L'nited Kingdom are going strongly in favor of the new government, Mr. Palfour, the late Prime Minister, being among the defeated candidates.

In connection with the present visit of the Prince of Wales to India, an event of much importance has been the reception of the Lama of Tibet in andience. When the Dalai Lama fled last year, at the approach
of the British mission, and refused to take part in the negotiations, he was deposed by the Chinese government, his temporal power given to a regent in comncil, and his spiritual authority transferred to another Grand Lama, the Pashi Lama. It is the latter who has been received by the Prince of Wales; and the significance of the event is in the fact that Tibet has thus thrown off its seclusion, and for the first time sought friendly intercourse with the outer world.

Much anxiety is felt as to the outcome of the Moroccan conference now in session at Algeciras, Spain. The nations chiefly interested are France and Germany; and both are said to be preparing for war over their conflicting claims, if the conference fails to find any peaceful solution of the difficulties.
Portugal will use two steerable airships in warfare against the revolted tribes in West Africa.

Missionaries in some parts of China have asked for protection, owing to the increasing activity of anti-foreign societies.
The national assembly of France has elected a new president of the republic, M. Fallieres, who will assume power on the 18th of this montl.

The Canadian Forestry Convention, recently assembled at Ottawa, urged the importance of a general forestry policy to be adopted by the Dominion and Provincial governments, and especially the preservation of forests on watersheds, so as to conserve througl, the year the equable and constant flow of streams. The Dominion government will introduce legislation in harmony with these recommendations.

It is reported that the Emir of Afghanistan will remove his capital to a more northern sitc. because of the scarcity of wood around Kabul, where the forests have been cut away to furnish fucl for manufacturing purposes.

Russia is still in a disturbed condition. with mome or less threatening rebellions in progress in different parts of the empire; but the elections for the new representative assembly are in progress, and it will be called together as soon as half its members are clected. Finland has heen pacified by the restoration of its ancient privileges.

A revolution has begun and ended in Santo Dmuingo. The president of the stormy little republic has fled, and the vice-president has succeeded him in office, with much less than the usuat disturbance which such a change of government entails in that part of America.

An agrecment has been concluded with the Sultan of Drunei for the appointment of a Bri ish Resident with power tor control the general administration of the state. This arrangement, which wem: into effect on the first day of Jantary, practically adds Brunci to the British possessions in Tionter.

The settled Indian pmplation of this coun'ry now numbers 108,000. The Superinterdent of Indian Affairs reports a gain in numbers in two years of about one and a half per cent. : and believes the country may well congratulate itself upom a
policy which has transformed its aboriginal population into a law-respecting, prosperous and contented section of the community, which contributes in many ways to its welfare.

A definite breach of friendly relations between France and Venezuela has followed the renowed discourtesy of the president of the latter country to the French representative at Caracas.

It is expected that the battleship Dominion, which brought the body of the late Minister of Marine and Fisheries to Halifax, will return to Canada next August. She is the largest war vessel ever seen in Halifax.

A number of Kansas towns are offering prizes to the people who have the best lawns about their houses.

A revolution in Equador has so far succeeded that two provinces support the insurgent leader in his efforts to assume the presidency.
The King of Siam has published a decree abolishing slavery in his dominions.
A serions famine prevails in the three northern provinces of Japan, owing to the failure of the rice crop.
Persia declines to accept the boundary line between that country and Afghanistan as approved by the British authorities. As Great Britain and Russia are both indirectly interested, this adds another to the many causes that seem to endanger the peace of Europe.

## Taachers' Bureaus.

Four Teachers' Bureans were established last term:-At Woodstock, by R. Ernest Estabrooks: Chatham, by H. Burton Logie: Harcourt. by H. H. Stuart; and in Elgin, Albert Co., by M. R. Tutle, M. A., The Pureaus were successful in placing all teachers who applied, the only trouble being that there were by far too few teachers in need of schools to fill all the vacancies reported to the Burcaus. In many cases where teachers resigned because of not getting schedule salary and applied to the Bureaus for new positions, the Pureaus were successful in getting the salaries raised so that the teachers could withdraw their resignations and remain.

Below are the Resolutions on Professional Etiquette adopted by Carleton County Teachers' Instititte, Dec. 2I., 1905:-
I. That we will not directly or indirectly underbid another teacher.
2. That we will not apply for a school prior to the date at which a teacher miay be legally discharged, unless we are sure the teacher is not going to remain.
3. That we will make an honest endeavor to learn what salary is being paid in the district, and not teach for less.
4. That under no circumstances will we teach for less than the minimum schedule of the New Brunswick Teachers' Association.
5. That we will not apply for any school unless we are willing to accept it if offcred.
6. That having accepted a school we will immediately cancel all outstanding applications.
7. That we will at all times endeavor to guard the reputations of other teachers.
8. That we will not pernit the discussion of our predecessors in our presence by outsiders.
9. That we will not seck to establish a reptitation at the expense of others.
10. That we will be especialy careful to stistain the reputation of our co-teachers and in no way undermine them in the esteem of the public.
II. That we will instruct those preparing for Normal School in the principles of professional etiquette.
12. That we will use our influence at all times to increase the salaries and to edtucate the ptublic to be just to teachers.
13. That we will stand by one another as far as we can honorably do so.
14. That we will at all times treat one another as we wish to be treated.

## School and College.

Mr. Aaron Perry, headmaster of the Kamloops, 13. C, high school, has been appointed to take charge of the commercial department of the Victoria high scliool.

Mr. Ralph St. John Freeze, of Sussex, has been chosen Rhodes Scholar for the University of New Brunswick for this year. Mr. Freeze graduated from the University in 1903, after a brilliant course, and since graduation lias taught in the Rothesay Collcge, at the same time attending the law lectures in St. John Mr. Freeze will take the course in law at Oxford. 1le was a close competitor with Mr. Chester Martin the last time the Liniversity had to choose a scholar, and in the present contest was unanimous* ly chosen from among ten competitors. Mr. Freeze is a brilliant sclolar, a hard worker, a good all-round athlete. and has a bright future ahead of him.

Mr. Arthur G. Cameron is the Rhodes' scholar this year for Prince Edward Island, He graduated with honors from Prince of Wales College in 1900 , and after twaching at short time entered Queen's University, Kingston, and is now in his senior year. He has made a fine record as a scholar and an athlete.

The first and second forward movements at Acarlin University have resulted in the raising of \$275.000 of which $\$ 150,000$ have been contributed by the Baptists of the maritime provinces, and the remainder, including M r . John D. Rockefeller's contribution of $\$ 15,000$, from ontside sources. This is a handsome addition to the funds of the University, due to the generosity of fricmuls and the exertions of its president, Rev. Dr. Tritter.

Miss Antoinette Forbes, 13. A., vice-principal of be Windsor, N. S. Acallemy, has been granted a three montha leave of almence, and Miss Jean Gordon of River John,
N. S., a graduate in arts of Dalhousie University, has bee:a appointed to the position for that period.

Mr. Theodore Ross, B. A., principal of the Macdonald Consolidated School of P. E. Island recently delivered a series of lectures in Charlottetown on educational development. Mr. Ross's training and methods of work fit him admirably to address teachers on this subject.

Chipman, Queens Counts, N. B., has a fine new school building, which was opened at the begimning of the January term, and may do for a consolidated school in the future. The architect was Mr. F. Neil Brodie, of St. John. It is finished with hardwood floors and ceilings and has a complete heating system. A large room is to be devoted to the purposes of manual training and domestic science.
Mr. Horace L. Brittain, who spent last year at Clark University, Worcester, Mass., has accepted the principalship of the Salisbury, N. B. school. Mr. Brittain has recovered frum a severe illness, and it is gratifying to his friends to hear that be is again in harness.
Mr. Abram Cronkhite, lately principal of the school at Bristol, Carleton County, has taken charge of the Gibson, York County school, in succession to Mr. C. D. Richards, who has assumed the principalship of the Woods:o ik Grammar School.

Miss Vega L. Creed, daughter of Dr. H. C. Creed of the N. B. Normal school has taken charge of the model school department, at Fredericton, lately taught by Miss Nicholson, who has obtained a three months' leave of wis ence.

The teachers from New Brunswick who took the course in Nature-stndy in the fall term of ryO5, at Macdonald Hall, Guelph, are as follows:- Miss Amnetta A. Bradiey, Fioneer; Miss Melissa M. Cook, Campbelltnn; Miss Estella M. Hartt, Kingsclear; Mr. C. Gordon Lawrence, Lower Dumfries; Miss Gertrude 1 . Morrell, Springfied; Mr. Hetcher Peacock, Murray Corner; Miss M. Eloise Steeves, Sussex; . Niss Jemnie R. Smith, Blissville; Mr. W. R. Shanklin, Shanklin.

Mr. E. J. Lay, principat of the Amherst, N. S. Academy, was recently presented with a handsome gold watch accompanied by an address in recognition of his cfficient management of the town library. This library was fombed partly by the efforts of Mr. Lay in 1889 , and he has had sole charge of it since 1901, giving his services as librarian free. It now contains nearly 2300 books and is supported in part by private subscription and in part by an anmat contribution from the town council. This shows what many teachers may do in thwns and comntry districts, for improving the conditions of a commanity.
In New Brmonswick the Chisersity of New Brunswick will appoint the Rhodes Scholar for ryot, 1909, 19t1; Mt. Alli:on for 1907, 1910, 1912, and St. Joseph's for 1gos". In Nova Scotia; Dathousic has the appointment in 1906, 190K, 1910: Acarliz in 197. 19t2; K̈ng's in 1909 and St. Francis Xavier in 1911.
A fine two-storeyed sehool buithing was recently opened a: Jort Elgin, Westmorland County. with good facilitics for lighting and heating, and room (mongh for pupils from surromeding districto The teaching staff concists of R. P.
 :114 Mins Birdie Doyle, primary

## RECENT BOOKS.

An Introduction to Practical Geography. By A. T. Simmons, B. Sc., and Hugh Richardson, M. A. Cloth. Pages 380. Price 3s. 6d. Macmillan \& Co., London.
This is an attempt to teach geography scientifically by experiments and exercises. The plan has led to the exclusion of ordinary descriptive matter, and laboratory work as in all modern scientific instruction takes its place. This forms a habit of mind, leading the pupil to take a keen interest in his surroundings. Maps, the Globe, Climate, on Land and Sea, are the four sections in which the work is divided.
The Language-Speller By Elizäbeth H. Spalding and Frank R. Moore. Cloth. Pages 144. Price 50 cents. The Macmillan Company, New York; Morang \& Company, Limited, Toronto.
This is a very successful attempt to correlate language work with spelling, which by the presentation of stems, prefixes and suffixes, fixes the meaming of the word spelled on the pupil's memory. Groups of synonyms occur in nearly every lesson. There is a regular course in composition, from easy stages, such as letters of application and businests, to themes more ambitious. The book presents an excellent method of teaching language and ifs related subjects.
The History of Virginia and the Black Hole of Calcutta and the Battle of Plassey. Edited by W. H. D. Rouse, D. Litt. Cloth. 128 pages each. Price 5 d . each. Blackie \& Son, London.
1 The History of Virgimia is a part of the adventures of the famous Capt. John Smith, whoe travels by sea and land cover a period of thirty-six years. He advocated the planting of colonies in America, and it was chiefly through this instrumentality that the Pilgrim Fathers established themselves in New England, where Smith spent two or ,three years of his life. The Black Hole of Calcutta is a story of absorbing interest, marking one of the most important epochs of British rule in India.
Macmilian's New Geography Readers. Book IV. Illustrated. Cloth. Pages 216. Price is. fd . Macmillan \& Company, London.
An admirable selection of good readings cinhraci:ng history, fables, adventure, poetry and stories, all written by well-known atthors. No better books can be found for school libraries.
Blackie'; Mojel Readers, Book IIf. Cloth. Pages 20 I). Price Is. Blackic \& Son, London,
A fine array of good readings suitable for little people, with beautift $t$ illustrations. The picture stories at the end are excellent for reproduction, and the songs in the book are suitable for schools.
Bruyere's Les Caracteres, Adapted and Edited by Eugenc Pellissicr. Cloth. Pages 180. Price 2s. 6d. Nacmillan \& Company, London.
This book is the first of a series dealing with the classsical French authors of the seventeenth and eightecath centuries. It contains many excellent features, in addition
to a critical introduction and notes, such as subjeats for Free Compositions, with a moderate anount of guidance, su:mmary of grammatical peculiarities, ctc. The book is a fine model for classical instructors and readers.
War Inconsistent With the Religion of Jesus Christ. By David Low Dodge. Cloth. Pages 192. Price 30 cents. Ginn \& Co., Boston.
This book, written by a man whose life has been earnestly devoted to the cause of peace, has the sincerity of conviction about it. Under the three divisions: War is Inhuman, War is Unwise, and War is Criminal, he presents the views of thoughtful men everywhere upon this subjects, and answers possible objections, from his point of view, with equal sincerity and conviction.
A Tale of Two Cities. By Charles Dickens. With Introduction and Notes by A. A. Barter. School Edition. Cloth. Pages 368. Price 2s. 6d. Adam and Charles Black, London.
The introduction to this book forms a good piece of literary criticism. It gives a short sketch of the history oi the novel, an appreciative summary of the life and writings of Dickens, the style, treatment and character in the book, with a note on the historical period. Of the story itself Richard Grant White has said: "Its portrayal of a noble natured castaway makes it almost a peerless book in modern literature, and gives it a place amongst the highest examples of literary art."

Blackie's Gems of School Songs, (Blackie \& Son London), contain a selection of the pupular melodies of England, Scotland, Ireland, Wales, arranged on the tonic-sol-fa notation. Price 2d.
Blackie's Model Arithmetics contain a multitude of examples arranged for the first three grades. Price 2 d . Blackie \& Son, London.
The "Council" Arithmetics for schools. Parts 7 and 8, by T. B. Ellery, F. R. G. S. contain a series of practical 'examples for higher grades, adapted for English schools. Adam and Charles Black, Soho Square, London, W.

Mérimée's Le Siége de la Rochelle and Edmond About's Les Jumeaux de L'Hotel Corncille, price 4d. each, are two stories in Blackie's Little French classes. The first is taken from a Chronicle of Charies IX. a record of events which preceded and followed the Massacre of St. Bartholomew, and the extract tells of the historic defence of the colonists under the intrepid La Noue against the Catholics under the Duke of Anjou, afterwards Henry 1II. Edmond About's stories appeal to the young student bicause they are interesting, easily understood, and have a strong English touch to them. Le V'erre d'Eau, by Eugene Scribe is a double number of the same series (price 8d.). $I_{i}$ is a story of conrt intrigue in the reign of Queen Anne. The incident which gives the play its name rests on the fradition of "the glass of water" alleged to have been spilled by the Duchess of Narlborough over Queen Anne. Although many of the historical and political details lack accuracy, it is interesting throughout and abounds with sprightly incidents.
Two Plays for Girls-The Masque or Pageant of English Trees and Flowers, in which pretty conceit

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flowers and trees from the woodland appear before Queen Elizabeth and solicit fer to make choice; and the Australian Cousin, an amusing dialogue. Price 4d. It is rather a pity that we should have to class the two together. Blackie \& Son, London.

In Blackie's Latin Texts we have here the sixth book of Virgil's Aeneid and the ten Eclogues of Virgil. Price 6d. each, in flexible cloth covers, with introductory critical notes. Blackie \& Son, London. (Is there iny sufficient reason for the different spellings "Virgil" and "Vergil" on the title page and in the lody of the book?)

In Blackie's Little German Classics, which begin a 10 w scrics, we have a numher of handy readers in flexible cloth, of about fifty pages each and at the modest price of 6 d ., containing short biographical sketches of the author. explanatory notes, and a well printed text. They will prove serviceable companions to those studying German, enabling them to obtain $2 n$ acquaintance with authors whose writings they might otherwise have no opportunity of seeing. Korner's Der I'efter aus Bremen. Schmid's Die Ostereier and Tehrokke's Der Zerbrochene Krug, are three favorite classios which introduce the series. Blackie \& Son, London.

In the English Counties' Series of readers, the design is to quicken the interest of children in their own surroundings by giving them a brief hiktoricel and gengraphical account of certain counties. The subject of the little book before us is Cumberland and Westmorland commties, by nature one of the most attractive districts in England. The series is illustrated; inciden:s and descriptivemalter are woven in to make the books intcresting. Price ed each. Blackie \& Son, London,

In Chancellor's Graded City Spellers, we have a serics that is likely to prove useful. The last of these is that for the eighth grade, which keeps up the plan of reviewing words taught in the preceding grades, giving daily advance lessons with systematic reviews at intervals; selections from the best literature for memorizing; rules for spelling, word building etc. Price 25 cents. $\mathrm{G}, \mathrm{N}$ Morang \& Company, Foronto.

The Education of Girls in Switzerland and Bavaria, is the title of a little book of 71 pages, by leabel I. Rhys, if the Training College, Cambridge, and head mistress of the

Liverpool high school. It is an interesting and instructive report of the methods in vogue in those countries for training girls. Price is. Blackic \& Sons, London.

## Recent Magazines.

The Atlantic Montlly begins the year 1906 with an uncommonly striking number in both the importance and the f:csiness of interest of its articles. These embrace subjects of political and social interest, an entertaining survey of the literature of the past year, a clear account of Esperanto the new proposed universal language and a study of recent American biograply. There are also very readable poems and stories, which keep up the traditions and literary flavor of the Atlantic.
The Atlantic fonthly for February has a varied and interesting table of contents, embracing articles on exploration, politics, literary and social subjects, biography, story, poctry.

The February Delinator, with its display of spring styles, is a most attractive number. Besides the fashions there is much of interest for the general reader. For the children there is a delightful girl's serial, Sunlight and Shadow, une of Alice Brown's Gradual Fairy Tales, and amusing gamea by Lina Beard. Motlsers will find Dr. Murray's paper on Exercise and Physical Culture particularly helpful.

The Chautauquan for January continues its sketches of Eastern lands-In China's Ancient Holy Land, up the Yangtse to Thibet and Chinese Classics are amoug the articles in this number.
The January Canadian Magazine has an article on the Indians of Canada, which shows that there are 108.000 in the Dominion within treaty limits. Besides other vocations they cultivate 50,000 acres of land, the annurl value of the products being $\$ 1,000,000$. There are 298 achools devoted especially to the edueation of the Indian.

The leading article in a recent number of Littell's Living Age, is a lucid and forceful discu*sion of The Revolution in Russia, by Prince Kropotkin. Its tone is calm but carnest, and its review of the situation as it has cieveloper since the ist of Janmary, 1905, is the most intelligent contribution which has yet been marle to the understanding of existing conditions in Russia

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## OMISSION

In the Journal of Educallon of Nova Scotia, October, 1905, page 187, Prescrlpllon. for Grade XI.
By the printer's mistake there has been omit ed from the prescriptions for Grade XI, in the October, Journal of Education for 1905, on page 887, the following prescription which is cor rect as published in the April edition preceding
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THE EDUCATIONAL REVIEW, St. John, N. B.

A reprint of Breton's beautiful picture, "The Song of the Lark," goes out with this number of the Review.

Our readers who lave sent in queries to be solverl, and correspondents whose contributions do not appear in this number, will kindly exercise a little patience. They will be attenderl to next month.

A preliminary annomement is made on another page hy Dr. Brittain, Secretary of the Provincial Educational Institute of New Brumswick, of the meeting at Chatham, in June next. This will be followed by a fuller statement and programme in a coming number.

The two prizes of booklets, offered by Rev. Mr. Boyd, on the best sets of questions on the pieture, "Saved," in the February Review, have been won by the schools of Miss Maud A. Williams, Harvey, York Co., and Miss Harriet S. Comben, St. John. For the benefit of other schools selections from these questions will be published in our next number.

The announcement is made of a summer school in French at McGill University, Montreal, during the approaching summer. Students who have attended this course since its establishment some years ago are very enthusiastic as to what can be accomplished in a few weeks, where "everybody talks and thinks, eats and drinks, dreams and sleeps in French."

The attractive courses of the Yale University Summer School are set forth on another page. ()ur readers would do well to consider the benefits of an advanced summer school such as at Yale or Harvard, or the more popular course at the Atlantic Provinces Summer School at Sydncy. There are hundreds of our teachers who would be greatly benefitterd if they got near enough to a summer school to feel the throbs of its fresh intellectual life.

The legislatures of Nova Sontia and New Brunswick are now in session, and several important amendments to the School Act of each province are before these bodies. In Nova Scotia a liberal grant is promised by the government to create a pension fund for teachers. In New Brunswick, Premier Tweerlie has introducerl a measure providing for compulsory education which, however, is to be optional in its working.
The New Brunswick Teachers' Association has petitioned the govermment, asking for compulsory colucation, the cessation of local and third-class licenses, the establishment of central gradeyl schools with parish school boards, a system of pensions for teachers. and additions to teachers' incomes from
enlarged county funds and inoreased provincial grants. These requests are reasonable, and are in keeping with progressive educational legislation. One proposal requires careful consideration--the climination of third-class licenses. Would it not be better to retain these and gradually increase the requirements? Others, such as the establishment of parish school boards, centralized schools, and larger county grants have already reccived the suppont of the Chief Superintendent.

Mr. Scott's views on courses of study and grading, as given on another page, are those of advanced educationists everywhere today. To make our grading system effective, there should be introduced into it a generous leaven of electives. The bright boy in a grood ungraded school in the country has a tremendous advantage over many city boys. From the beginning his ambition is roused and his thoughts widened by the recitations of the larger scholars around him. The school course never becomes monotonous, and his interest is constantly quickened by the new things he hears, the fresin discoveries made day after day. When he gets into smaller advanced classes, where he receives but a small share of the teacher's attention, he is forced to rely upon himself and the stock of ideas he has been accumulating in the lower grades. That is why the lad trained in a grood country school, has often a keener observation, a greater interest in books and a better preparation for life generally, than the lad trained in the hard and fast grades that Mr. Scott wonld like to reform.

It gives one a feeling of hope in a better future for education, when a man like Mr. Soott, finds time amid the duties of an absorbing profession, to sturly as closely as he appears to have done, the educational work of the community in which he lives. If more men and wonnen could reason publicly about these things, in an amicable spirit, how many vexed problems would be happily solved? And Mr. Scott has set a good pace. He is too much of a tactician to give advice. He has only unstinted praise for the teacher and sclrool official who are doing faithful serviec, but he would overlook no educational waste, or the lack of common-sense methods. Throughont he is frank and yet judicial ; and his ready humour invokes much kindly sympathy on bohalf of the reader.

## Report of N. B. Schools.

The report of Dr. J. R. Inch, Chief Superintendent of Schools for New Brunswick, is a detailed statement of the educational progress of the province for the year ending, June 30, 1905. He notes a decided increase, not only in the number of sohools and pupils, but also in the percentage of attendance, over the figures of the two preceding years, although during these years the enrolment was less than in any year since 1893 .

The number of schools in the first term of 1904-5 was 1,784 , an increase of 37 ; the number of teachers was 1,851 , an increase of 36 ; the number of pupils was 57,906 . an increase of 1,708 . In the term ending June, 1905, there was an increase, compared with the previous year, of 28 schools, 50 teachers, and 1,641 pupils. The proportion of population at schoot was I in 5.71 in the first term, and I in 5.48 in the second term.

The percentage of attendance has also improved; for the first term it was 66.27 , where it was 65.60 for the year before; for the second term it was 59.60 with 58.50 for the year before.

Of the teachers, only 16 per cent. are men, less than 25 per cent. hold licenses above Class II, about 50 per cent. hold licenses of Class II, and about 25 per cent. hold the lowest class of licenses, which class has increased from 21 to 62 since 1900. The percentage of male teachers is annually becoming smailer. The average salary in Grammar schools is $\$ 979.52$; in superior schools, $\$ 587.54$ : first class male, $\$ 577.67$, female, $\$ 339.72$ : second class, male, $\$ 316.09$, female, $\$ 248.23$ : third class, male, $\$ 234.90$, female, $\$ 194.90$. There has been a slight increase in the average, the largest being $\$ 35$ for first class male teachers, and the smallest $\$ 2.73$ for third class male. This small increase is encouraging, a sign of what is hoped for on a larger scale. The Superintendent. Principal Crocket of the Nornal School, and others, have several important suggestions to offer in the matter of improved salaries.

Commendable progress has been made in consolidated schools in many districts of the province: in manual training, the repont of which by Supervisor Kidner is very instructive reading, as is that of Dr. John Brittain, the supervisor of school gardens and nature study. The inspectors' reports are also very interesting reading. giving much detailed information on local aspects of education.

Our Coasts. II.-Their Character.
Professor L. W. Bailey, LL.D.
What are the lessons of the sea-coast? They are many and most interesting. To appreciate them, all that one needs is to observe and to think.

The most important lesson to be thus derived is, I fancy, the fact of change. Everywhere this feature is pressed upon one's attention, though more obviously of course at some points than at athers. Let a student stand upon a seashore, such for instance as almost any part of the Bay of Fundy coasts, and after satisfying his sense of beauty or of grandeur, ask himself what fact forces itself most strongly upon his attention? Is it not the fact of waste and wear? If the const be bold, like that of Hopewell Cape, illustrated in the last chapter, or that near Alma, N. B., of which a


CLIHK NEAK ALMA, N. B.
photograph is here given, he will find that all the striki:ng and often grotesque details of the picture are the evident results of a carving process, whereby the sea is eating, or attempting to eat, its way into the land. Here there is a great battlemented wall of which, as in the photograph, the top overhangs the base, and below which the visitor treads with fear, as he sees great masses already disjointed and liable at any moment to fall, hanging threateringly above his head; here the sees great angular blocks, often many tons in weight, which have al-
ready fallen; at one paint he sees a huge cave, sheltering perhaps some pienic party, but evidently owing its origin to the excavating action of the waves; at still another point he sees some huge mass of rock, wholly disconnected from the mainland of which it once formed a part, and now, though possibiy eighty or a hundred feet in height, resting on so narrow and frail a base that one wonders how it can stand at all. Sometimes, with that tendency which Nature so often exhibits towards the ludicrous, the details of the sculpture suggests fanciful resemblances to familiar objects, or to the human form or countenance, and these explain the names they bear, such as Anvil Rock near Quaco, the Friar's Head on Campobello, the Southern Cross on Grand Manan, the Owl's Head on the coast of Albert county, N. B., the Devil's Dodging Hole, and the like.

Evidently to produce such results a large amount of material must have been removed, and we are led to ask at what rate does the removal take place? How much has been removed, and how long a time was required for its accomplishment? Is the removal uniform at all times and places and is there any limit to its continuance? Finally what has become of the material removed? Some of these questions we must now attempt to solve.

In the case of the "Hopewell rocks," where for nearly half a mile there is a succession of bluffs and outstanding masses, carved with a degree of variety and grandeur probably not approached elsewhere along the whole Atlantic seaboard of America, the visitor must choose his time, for at high water passage along the base of the bluffs, except by boat, becomes impossible. The waters not only reach but sweep the face of the bluffs, being endlessly moved by wind and tide, while in periods of storm the waves are driven with fury against the rocks, reaching far above their ordinary level, and striking with a force which even the hardest materials cannot altogether resist. Water then is the tool by which all this work is being accomplished, and that work never ceases. Ever since there have been sea coasts upons which the restless waters of the sea could act, the wear of the shores, their waste and removal, have been continually in progress, and the results which we witness are at once the proof and the measure of the changes thus effected.

Put obviously not all portions of the ooast are equally susceptible to wear. Rocks are of various
degrees of hardness and compactness, and while some, like granite, are but slowly affected, others, like freestone or slate or shale, crumble easily and are therefore rapidly removed. In granite again there are few divisional planes. The rock is massive; and hence the waves are spread over broad surfaces and lose much of their power. In stratified rocks on the other hand, i. e., in those in which the materials are arranged in beds or strata, therc are numerous alternations of hard and soft material, or lines of bedding, joints and the like, which are like fissures in the rock and give the turbulent waters a chance to act. Yet again, in stratified rocks the strata may be horizontal or inclined, they may be tilted at high or low angles, they may slope towards or away from the point of attack, or they may stand, end on, as it were, to the fury of the sea. And all these differences tend to introduce variety into the results of sea sculpture. A few illustra-

C.APE BLUMIDON, N.S.
tions will serve to make the matter more intelligible.
In an earlier chapter refercnce has been made to the contrasts exhibited by the different shores of New Brunswick and Nova Scotia. Now review these characters in the light of what has been said above. Why is the "north shore" of New Brunswick gencrally low, with the adjacent waters shallow? Simply because the rocks which form it are soft and easily disintegrated, filled with planes which cnable the waters easily to undermine them, and lying in nearly flat beds, which if not wholly worn down to fill up the adjacent waters, remain only here and there in the form of low bluffs. The character of the Bay of Fundy shores on the other hand, leaving out of view fort the present the dyked marshes at its head, are lowid and high, because the rocks of this coast are cither hard and crystalline. or clse form vertical or steeply sloping walls of rock. against which the waves may dash themselves with enmparatively little result. So the Nova Scotia
side of the Bay, like the northern side of Grand Manan, composed in each case of volcanic rock, hard and crystalline, presents to the sea an almost unbroken front as from Blomidon to Briar Island -or from the Northern to the Southern Head of Grand Manan, while the shores east and west of Picton, like those bordering the Gulf in New Brunswick are, like the latter, low, and for a like reason. The shores of the Southern or Atlantic sea-board are determined in a similar but more special way, which will presently be noticed.

We have now to observe that as the general character of a sea-coast is determined by the general nature of the rocks which form it, so all the minor details are to be explained as the result of similarly acting causes. Hard rocks, resisting wear, stand out as headlands or promontories-such as Point Lepreau, Cape Spencer, Martin's Head, Point Wolf and Cape Enrage, in New Brunswick; Cape St. Mary, Point Fourcher near Yarmouth, Aspotogan in Chester Basin and many others in Nova Scotia: soft rocks $y$ leld readily and their removal determines bays and indentations, of which it would be easy to cite numerous examples. So at any one point alternations of hard and soft beds, as inlustrated in the picture on next page of the Nova Scotia coast near Lockeport, leads to the removal of the soft strata, leaving the hard to form long parallel reefs rumning out to sea. If again, as at "the Ovens" near Lunenburg, where all these effects may be admirably studied, steeply inclined strata are turned end on to the sea, the divisional planes between the beds are rapidly widened, long but very narrow and lofty caves, sometimes a hundred feet in length, are produced, and into these the sea, driven with irresistible force and gradually uplifted to the roof, sometinies excavates an outlet for itself, and issues in the form of a jet or fountain known as a "Sponting-Hom." The well known "Churn" at Yarmouth and "The Cream-pots" near the same place are other good illustrations of the incessant conflict between sea and land.

But now we lave to motice a second evidence of change, and with it to recognize a second lesson afforded by the study of the coast. It is this, viz., that destructive operations in Natsere are always associated with and follozied by constructive ones. If the action of the sea upon the coast is one of wear and removal, the material removed must be disposed of. As the sculptor in the carving of his statue is
necessarily surrounded by his chips of marble, so in coast-sculpture chips accummulate, and the assemblage of these chips constitutes our beaches. One has only to examine the latter to see that this is the case. At any one point it is easy to see that the pebbles of the slore are largely made up of fragments, evidently derived from the bluffs near by; and if with these there are others that cannot be so idertified, one must remember that the same agencies, waves, tides and currents. which are attacking the coast, are like the legions of an army. movable factors, and may not only loosen but transport the matter brouglat under their influence. Moreover, as the power to transport varies with the velocity of the moving water, fine material will be
a very good one occurs at Port Maitland near Yarmonth, and a still finer one a little west of the mouth of tine La Have river in Queen's comnty. Of muldy deposits the most remarkable are those about the liead of the Bay of Fundy, adjacent to the dyked marshes, the latter being themselves deposits of shmilar origin. now only kept from daily tidal submergence by artificial embankinents.

The space at onr command permits only of slight reference to some of the other "lessons of the const." Another one of these is that watural changes are none the less real because they are slow. As we camot recognize by the eye the movement of the hour hand of a clock, or the growth of a tree, yet afer a certain interval, beenme aware that a change


REEF AND BLUFF NEAR LULKEYUK1, N. S,
readily removed and be carried to a distance, while heavier and coarser materials will be more easily dropped. Thus, whether waves, tides or currents be the transporting agency, the materials of the beach will be coarse or fine, just as the action of these agences is powerful or wak. Thus, about expmed headlands and in expesed situations we commonly find the shore made up of large wed rounderl fragments, often $t(x)$ heay for a man to lift, and making what are known as sea walls. In intervening bays the shore is more apt whe sandy or gravelly, forming "beaches" in a more restricted sense, while alonot the mouths of rivers or in offshore shallow sommelings the material is more commonly a fine mucl. "true "leaches," sutable for bathing. are found at many points around the shores of the Gulf of St. lawrence. but are rate on those of the Bay of Fundy. So they are not common upon the . Itlantic sealonard of Nowa Sontia, though
has occurred, so upon a coast we may be able to observe very little alteratoon from one month or even one season to anvether, yet, by careful observation or measurment, extended over a period of sears, we are leol to recognize the fact that not only has there been a change, but that this may be very considerable. . 111 coasts muler the innceasing attacks of waves, and tides and currents are wearing away, and comtributing of their substance to the weean hlowr.

The last lessum to be neterl here is derived from a comparis.m betwen the materials of the beach and these of the s.k ore from which they were derived. The beach depmits are pebble beds, sand beds or mand beds. according as the agents proxtucing them have hech powerinl or weak, swift or show an examinetin of the eliffe near by will show that they are also composed of pelble-fecks, sand-beds or claybeds, only the latter are hardened int: rock. Thus
they too represent old beach deposits, and must once have been at or below the sea-level. The land has not always been as it is to-day. How they became hardened into rock and were lifted to their present position, perhaps several hundred feet above the sea, we shall have to enquire in a later chapter.

## March Birthdays.

March Io, 1452.-Ferdinand King of Castile and Arragon, at seventeen, married Isabella, heir to the throne of Castile; conquered the Moors of Grenada which he annexed to his dominions; fitted out a fleet of three vessels, by which Columbus was enabled to discover America; conquered Naples and Navarre.

March II, I544.-Torquato Tasso, an epic poet, born at Sorrento, Italy. His greatest poem was "Jerusalem Delivered." His mind became unhinged in later life, and he was confined for periods in a lunatic asylum. He was invited to Rome to be crowned for his works by the Pope, but died before the ceremony could take place.
March 12, 1684.-Geo. Berkeley (bishop) born at Killerin, 1reland; a philosopher and writer of great merit, wrote the "Analyst" and "A Word to the Wise", came to America and preached two years at Newport, he was a great friend of Dean Swift.
March 16, 1751.-James Madison, was fourth president of the United States, and one of the framers of its constitution. Contrary to the views of the people of New England, he declared war against Great Britain, in 1812.
March 19, 1813.-Dr. David Livingstone, a famous missionary and explorer was born near Glasgow, Scotland; his parents were poor; he worked in the cotton mills while a boy, attending night school; studied with a view of becoming a missionary in Africa; explored the interior of that comntry, and discovered some of the sources of the Nile ; died near Lake Tanganyika (1873) where he was found by Henry M. Stanley, in 1871. His books on Africa are accurate and of great value.

March 20, B. C. 43.-Ovid (Publius Ovidius Naso) a great Latin proet, was born at Sulmo, ninety miles from Rome. He received an elegant education, travelled, then spent his tife at court, until he was banished. He died in exile. He wrote chiefly love elegies.

March 21, 1763.-Jean Paul Richter was born at Wunsiedel, Bavaria; a popular quaint and original German author and humorist; "Titan" was his masterpiece; "Quintus Fixlein," his principal novel.

March 22, 1797.-Emperor William I., born at Berlin; ascended the throne in 186I; appointed Bismarck minister of foreign affairs; united the German people into a nation.

March 28, I592-John Amos Comenius, an educational reformer and writer, born at Nivnitz in Moravia. Lost all his property on account of the Spanish wars; tatught school in Poland; was invited to several foreign countries to reform methods of instruction; he may be rightly considered as the founder of method; his personality was noble; his life inspiring.

March 31, 1732.-Franz Joseph Haydn, born near Vienna, of humble parents. He was a distinguished musical composer, but his early life was a life of hardship; his masterpieces were the oratorios "The Seasons" and "The Creation."

## Winter.

Orphan Hours, the year is dead! Come and sigh! Come and weep!
Merry Hours, smile instead For the year is but asleep.
See! it smiles as it is sleeping,
Mocking your untimely weeping.
As an earthquake rocks a corse In its coffin in the clay,
So white Winter, that rough nurse,
Rocks the dead-cold year to-day.
Solemn Hours, wail aloud
For your mother in her shroud.
As the mild air stirs and sways The tree-swung cradle of a child,
So the breath of these rude Days
Rocks the Year. Be calm and mild,
Trembling Hours; she will arise With new love within her eyes.

The enswer to the 3 nines' puzzle in the February Review is:

$$
\frac{9+9}{.9}=20
$$

Correct solutions have been received from A. E. Barton, Noncton ; C. E. Lund. Sackville; and by A. E. G., Belle Isle, Amapclis comnty. A.P. G., of the latter place, sends an ingenions solution, which, however, dces not exactly meet the conditions.

## The School From a Parent's Standpoint.

S. D. Scott, Editor of the "Sun," St. John. - Begutat l-ebuary.

But here comes in another element which again presses more upon the city teacher and pupil than tupon the teacher and pupil in the country school. No doubt there is an advantage in scientific grading. It must be a great saving of labor, and an escape from confusion. Doubtless the course of study is well devised and adapted to the powers of tne average onrld. Buc 1 think there are many teachers in the town who would like to shake thenselves free from the restraint and be in an ungraded country school, where they could lave greater freedom to deal with the actual boy and girl according to their needs. It is possible that Procrustes took technical advice when he made his beds. He may have measured a hundred or a thousand prisoners, ascertained therr average lengih, and reasoned that an individual adjustment to this standard would be a scientific proceeding. To stretch some individuals a few inches, to cut a fraction from the extremities of others might be a persomal hardship but it would simplify the work of bed making and tend to discourage abnormal types, producing in the end a well graded and symmetrical oorps of graduates, even though some should be crippled and some dead. A general course of sturly seems to be necessary for all schools, and grading is needful in schools of many teachers. But it seems to me that with us the system is too much and the individual too little.

There are marked differences of opinion in this town, and throughout the country, on the subject of the school course. Some of the parents complain that the schools try to teach too many things. Others would like to see manual training, household economy, type writing and commercial classes. Some contend that the schools cost too much, and that the free classes should close when the high school is reached. A few would like to sce German added to the languages tanght, as linglish woulkl be in a high selnool in Germany. (ihasidy stories are told of girls whose health has been broken by hard study in the common selnohs. Yet every Jume 1)r. Bridges meets these accusations with a row of girl graduates in a shockingly rolust condition. Nany of us observe that loys and girls of average ahility manage to cover the work of the year, in some sort of way. whthout altogether meglecting their ammse-
ments. The truth seems to be that the course of study offers work enough for the average child to make a creditable record with moderate diligence. To a dull child, or one with exacting outside duties and discouraging home surroundings, or feeble health, the full course may give hard work or more than can be done. Those who suffer mosit are probably the clever competitors for prizes and honors, who conld pass the examination and take a fair place with half the study. This extra work is voluntary. The same amount of extra toil could be expended on three studics or on one, as is given to ten or twelve. It is centainly not fair to attribute to the number of studies any collapse from over work on the part of the competitons for medals.

But while I do not believe that the number of studies at present prescribed, even with manual training and domestic silence added, is too large to have in the curriculum, it seems to me to be unwise to compel every pupil to take them all, or to take a particular list of then in one year. There is surely too little arlaptation in our schools to the capacity, the reguirenent, and the time available for school work of the various students.

Here in St. John we have, say, 1200 children entering school every year. Of whese one-half or less pass beyond the seventh grade. Their school training is completed at the grade which they are supposed to reach when they are twelve years old. Of the survivors, four-fifths fall ont before they reach lingh school, and of those who go into the high school hardly more than one in four remains to graduate. That is to say out of a hundred St. John pupils who enter the sclools, fifty have rropperl out at the end of the scwenth grade, fifteen are left to enter the high school and muly five are in at the graduation.

Now this is a case where the authorities should bot leave the minety and five who fall ont, and seek only after the five who not astray. These fifty wh, stop at the halfway house, are as (lear to themselves and as important to their families as the fifty who go farther. In the first place we parents ask that it be made easy for them to contintte in solrool, and secombly that those who cannot continute should get as much as possible out of the years they stay. The less time they have at school the more precions that time is.

Bint, at this stage speaking strictly as a parent, 1 whject strongly to the contention that the digh
schood is here for the rich, that the poor are unfairly taxed to maintain it, and that in the interest of the oppressed working man free classes should stop where the high school begins. The exact opposite is the case. The high school is the poor man's college. It is the most democratic institution in the town. Any one who looks over the names will find that a large proportion, especially of the girls, are from families who could not afford a private school. Don't we know boys and girls in the honor list whose widowed mother supports them by manual labor? Have we not seen the sons of mechanics take the higinest prizes these schools offer? Opulent citizens take their choice between sending their sons and daughters to boarding schools and making lise of those free classes. They maintain Netherwood, Rothesay, Mt. Allison, Edgeh月, Acadia, and schools in the upper provinces and the old country. For the poor there is one place where the youth can take advanced school work, and that is the high school of the place where his people live. My observation is that the people who complain most of the cost of this school are not the poor but the large taxpayers, some of whom are sending their children away. I am sure that the most of irs parents appreciate the high school and the work that it does, and that those who desire their children to have some glimpse of the world of scholarship and cannot afford them a college tnaining are glad to know that they can be carried to the sophomore year in a free school at our doors.

As to the courses of study, let me say again as one parent, I would like to see them all continued, and more attention paid to nature-study, mamual training, domestic science, and commercial classes. At the same time it seems to me that all the children have sufficient work cut out for them, and a large proportion of them too much. I would go in for more electives and begin them much earlier. There are now scarcely any. It is allowed in the high school to choose between French and Greek, and I believe between botany and something else. lint practically everything in the bill of fare is compulsory until the high scinool is reacherl. The pupil or his parents are not permitted to follow the example of the unaccusionerl hotel grtest who showed the menu to the water and asked whether he might "skip from here down to there." Not only is the child required to do all the classes, but he must make a certain progress in each one every year.

Whih some small reservation, it is, 1 believe, true that a child who fails in one or more subjects out of a lot cannot follow on with those subjects in which he succeeds, but must go back and take this familiar work over again, because there was something else assigned to him the same year that he could not do.

Now I speak with due deference that this seems to me to be stupid. I know that the teachers and the superintendent try their best to mitigate the evil, and that in the lower grades they do not stand wholly on technical markings, but grade the child who seems able to do the work of the next room. As the children grow older the system becomes more rigid, and many cases of hardship, even of cruelty, arise. For I take it that it is simply cruelty to take a boy who is under sentence to quit school at thirteen, and make bim go again over work that he knows, sibuting out from him torever all the advantages of one year of higlier training. In such cases the child becomes listless, laving no stimulus of curiosity and no charm of novelty, and as a student he is liable to be greatly demoralized through all the rest of his school days if he does noit fall out altogether.

On tive other hand if a point is stramed and the child is advanced to a higher grade, while he does no: understand some of the subjects below, he is liable to lose tonch altogether with these subjects, and to waste the time he is compelled to give to them. It would seem possible to me to arrange a system which wonld grade a child in some subjects and to leave him to take the others over again with his old class. The grading might be to some extent, by subjects, and not by a level standard, covering the whole range. That is exactly what would happen in an ungraded country school, where a pupil is carried along in each subject as fast as he can get allead in it. And it is the same thing that would be done with an undergraduate or a postgraduate student in the Liniversity of Chicago or the greatest German imiversities. There is no educational reason why a child should be reading Cresar at exactly the same time that he is working a particular book of Euclid, and there are many reasons why he should not be made to work over again the geometry that ine knows because he does not know his Latin verbs. If we read two books and do mot understand one, we do non read over the one we do understand. If we plant several apple trees, and one or two die we rlo not on that account replant the ones that grow.

It is not for me to say how the thing should be done, but since the school is for the child and not the child for the school I should say that the chiid should try again the work that he failed to accomplish and go on in that part in which he thas succeeded.

There should be more accommodation to the powers of the child. It does not seem to be good economy that one who can do in eight years the work of the eleven grades, as now arranged, should be compelled to waste eleven years on it. You shorten the time by allowing him to take two years in one, but that may be too much. Why not have an adjustment by which he call take four years in three, fairly distributing the task ? If this cannot be done these extra manual training, domestic science, commercial classes, and nature studies come in well as supplementaries.

But I am more ooncerned about the dull child, or the one who is handicapped and cannot do all the work in one year. It seems to me that instead of compelling that one to do one year's work in two. and then perhaps the next year in two, until the unfortunate is so much taller and older than his classmates that he falls out altogether, he might repeat one-third or one-fourth of his work, taking two years in three or three in four, and in the end getting along a great deal farther than he can now.

In every community there are feeble minded chitdren, whose powers are small but catiable of some slow development. Under our system they soon became hopelessly clerelict. Wie should have a school on purpose for these. But for that much larger number of children of less that average intelligence, who cannot quite keep the pace, something better should be done than now seems possible in the city school. They might have a course selected for them, clropping ont some of the work which seems beyond them, leaving tiem to $(\underline{y}$, on with studies within their capacity, or with their prospective requirements. A child who can $n$ ot learn mathematics may learn reading and writing. the elements of grammar, and le able to take a gron l course in history, geography, and nature sturlice. Mamal training, or scientific training, or lamednuld economy or some of the fads migith be the thinge this child needs to introduce himn to the world if ir which he was born. At all events I see in these studies smnething on which the brilliant book student and the child with certain mother matural gifts
of eye, and hand, and mind, may meet on a level ; where false and one-sided estimates of their relative values may be corrected, and where the child who has been almost a derelict in the school, may get back the proper respect that he had for himself when he was a baby.

In making the appeal against some features of the system that seem to me too severe I do not forget that the chief superintendent and the other authorities, must have surveyed carefully, as experts, the ground over which as an amateur I rush with the recklessness of those who go ahead of the angels. Dr. Inch has been a teacher, and a good one, from the common school to the head of a university. He knows his business and is sympathetic in his administration. Inspector Carter is progressive and somewhat radical. Superintendent Bridges is a thorough workman and a canse of thoroughness in others. I have hope in them all, that they have not done the last thing and said the last word in the regulation of studies. One does not like to think of a school course as of supernatural origin "which meither listlessness nor mad endeavor, nor man nor boy can utterly abolish or destroy."

I prefer to think that it is capable of modification and improvement, that the way may be adjusted to enable our children to pursue to the limit of their time and opportunity the studies suited to then, -not compelling them, for instance, to take up the study of a language in the last few montlis of school life. with no hope of progress in it, while they are shut ont from advancement in the line of their aptitudes. It has been found possible in Ilalifax, where the schools cost about the same per head as here, to carry on manual training classes, and to give a three years' High 'school commercial course. This last is a modification of the regular high school work, dropping classics and perlaps some of the natural science subjects, adding the usual commercial studies, with more advanced and practical work in French and history and economy. With the exception of shorthand and typewriting, nearly all the work is done by regular members of the academic staff. We also can do these things in the figh school, and to a certain extent in the lower chasses, without reducing the walue of the schonls as a place of general training and discipline.
Yet, lasily, let me say I certainly would wish to ratarl well the part of the schond work that makes : chlture, and manioxwl, and iwnomitowerd, and nod
entirely give over the schools to bread and butter studies. When a great number of people are wasting their good time trying to make millions, and a greater number of people are wasting their time scolding about them, it would be a good thing to try to bring up one generation to give attention to things that last longer.

## Lamb's The Adventures of Ulysses.

Notes by G. K. Butler, M. A.

Under his Greek name of Odysseus one of Homer's great epics the "Odyssey" tells at greater length this same story. There are many English translations of which that by Butcher and Lang is one of the best. Ulysses was a Greek who joined in the siege of Troy with the other famous heroes. The Trojan whose wanderings ended in Italy and who was regarded by the Romans as their progenitor was Eneas. Of him, too, and his wanderings. another famous poem was written, the "Eneid."
P. 97. 5. Ithaca was an island on the west coast of Greece. 1s. 9, Io. Compare Howe's lines on his approach to the shores of Nova Scotia in winter, "Mantled in snow," etc. 1 II. Meaning of phrases "partake of her immortality"? and of "enchantments" in 1. I3. 1. I5. Troy was on the northwest of Asia Minor not far from the Hellespont. It was known by the Greeks as Ihium, hence the title of Homer's other yet more famous poem the "Iliad." 1. 16. The Cicous were a people who lived in what is now called Turkey, just north of the Agean or Archipelago, a little to the east of the famous town of Philippi. 1. 20. Study the word "store." How is it commonly mis-applied at the present tinue.
P. 98,1.4. Meaning of "make good" as found in this line? 1. 5. What part of speech is "something ?" What is it nsually ? 1.6. Meaning of "Having odds against then ?" 1.9. "The third day," parse the worl "day". 1. Io. Malea the most eastern of the three capes in the extreme south of Greece; modern name St. Angelo. 1. 12. Cythera is an island just southeast from Cape Nalea.
From this point in the story on we are in the regions of myth, which like "Fairyland" are not found on the map. 1. 16 .

> In the afternoon they came unto a land In which it seemed always afternoon.

These lines and the rest of Tenuyson's "LotosEaters" would interest the cliildren. 1. 20. Meaning
of "pernicious." 1. 24. What part of speech is "needs"? Parse "eat" in the following line. 1. 29. Give another word with the same meaning as "betwitched."
P. 99, 1. 4. Meaning of "governed by his own caprice ?" 1. 7. What is our more common word for "artificers" ? Look up derivation of each and find a further proof of the composite character of the language. 1. II. Look derivation of "hospitable" and also of "hospital" and see if there is any connection between them. 1. 20. Meaning of nword "artless?" Is it the opposite in meaning to "artful" as one might expect? 1. 21. Is "tenant" here used in its more modern common meaning ? 1. 26. Here we have "store" again. Compare it with same word previously used. 1. 27. et seq. The Greeks regarded as utter barbarians those who drank swine undiluted with water. Perhaps, too, in these lines we may get a hint of Lamb's own special weakness. 1. 31. "A goat-skin flagon" may help those who don't already know to understand the saying about puttirg "new wine in old battles." 1. 35. Some people use grats' milk allogether, regarding cows' milk as unclean, and not fit for human food.
P. 100. 1. 2. Meaning of "feeding his flock"? Why go to the mountains ? Why not leave them out at night as we do here? 1. 5. Meaning of "against" here? Of "uncouth" in 1.7? 1. 9. Neptune, known to the Greeks as Poseidon (pron. Po-si'-don), u as one of the three gods who divided the universe between them. The other two were Zeus (pron. Zus) and Pluto or Hades. Neptune is generally spoken of as the god of the sea. 1. Io. Meaning of "to a brutish body" etc.? 1. I3. Instead of "massy" what word do we generally use? How heavy a stone could twenty oxen draw? 1.27. The name "Agamemmon" applied to a ship was made fannous in later times by one of England's heroes. Who was he? 1. 32. "Jove" was called by the Greeks "Zeus." It will be seen that Lamb takes the Latinized form of all the words when there are different forms. 1. 36. Look up the story of Zeus in a classical dictionary if you can find one. It is too long to put in here. 1. 37. Parse "bid."
P. IOI. 1. 2. "Wise caution" is characteristic of Ulysses who was the most crafty of all the heroes. and in later time his character was represented as being even worse than merely crafty. He is pictured by Sophocles as saying, in effect. "The end justifies the means." 1. io. What word means "man-

"THE SONG OF THE LARK"

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eaters" ? Where are they found at the present day? 1. 15. Look up derivation of the word "distracted."
P. 102.1.5. Which one of the gods in particular took an interest in Ulysses? The answer can be found in the story, 1. Io. Meaning of "waxed;" what is its opposite ? 1.24. Study the word "plied". 1. 34. "Heartening"? 1. 36. Meaning of plrase "were used to heave"; do we use the word "used" as here ?

I'. Io3.1.3. Difference in meaning between "auger" and "augur." 1. 30. Meaning of the word "ambiguous;" look up its derivation, 1. 31. Meaning of "gross wit"? and of "palpable" in the next line? 1. 35. Instead of "knots" we woukl more likely use some other word. What?
P. 104. 1. 6. Is there anything appropriate in the term "fools" as applied to sheep. 1. 13. Meaning of "rout" in this line. 1. 32. Meaning of "ebl)": 1. 3 . Homer's epithet applied to Odysseus was "muchenduring." 1.37. Meaning of "beat the olel sea":
P. 105. 1s. 6, 7. In what part of the Mediterranean are they now, judging by the wind which is to carry them bome? 1. 21. The word "storc" again.
P. 106. 1. 10. Study "have;" is it the auxiliary "have" or another word? 1. 32. Express "surpassing human" as one word.
P. ro8. 1. 1. Meaning of "cast lots." How was it done: One way among the ancients was by drawing from an eathenware jar. 1. 20. "Proulentest" is scarcely formed as the grammars would have us do it. How would they? 1. 24. meaning of "train"?
P. 1o9. 1. Io. Embracing the knees was among the people of that time the favorable mode of making a supplication. We find it many times in classical literature. 1. 24. Mercury was the messenger of Zeus, called by the Greeks 1 Iermes. 1. 20. Iarse "thou," in "thou most erring," etc. 1. 36. Meaning of "sovereign" here. How is it comecterl with usual meaning of word?
P. ini. Styx was one of the rivers of Harles, 1. 20. "Massy" here again. 1. 21. "Regale" is commonly a verb. Here it is a noun, with what meaning?
P. 112 Teiresias, the seer, is one of the characters in the most fanmus of (rieek plays. "(Edipus Tyrannus.

> ro be continued

The Canarlian Forestry Association meets at Ottawa, March 8.

## Art Notes.-No. IV. <br> By Hunter Boyd, Waweig, N. B. <br> The Song of the Lark.

The pioture selected for this month, is a wellknown work, by Jules Adolphe Breton (born 1827 -).
One would like to know what title it would be likely to receive if, the label being concealed, it were examined by persons, who had nat previously net with it, in any form of reproduction. Such persons are happily now, more seldom met with in any walk of life, and yot we note that the lark occupies small space in the winole picture. Again let us suppose that the label is displayed, but the little bird conceated, and many persons will probably be of opinion that the singer is the peasant girl, who because she is an early riset, or for some other reason is called a lark. In order to justify the title given by Breton, that little speck in the heavens ought to dominate the whole picture, and we are confident it does. It is very singular that we have been introduced to three pictures in succession, that depend upon the suggestion of sound for their enjoyment, but unless the Barbizon artist can make us hear the lark as it soars, we shall fail to share the feelings of the girl, and her sympathetic painter. Most of us are at a disadvantage in one respect, for there are few in these provinces, who have either seen or heard the true skylark. Hence the study of this pioture is a particularly good one for the strengthening of the imagination, not alone the visual, but largely the formation of vocal imagery. We have not only to follow up the hints here given of rural life in France, and particularly of Barbizon, from the aspect of the landscape, the dress of the girl, the prevalence of hard labor, but we have to reproduce the lark and its merry smg, and by moting its effect upon this peasant we stand at the side of Preton anvl are enriched by his experience.

If our admiration of the picture presented with this copy of the Review; leads to the purchase of others, by the same antist we shall soon beome acquainted with his types, and learn how he regarded them. For this purpose, we specially commend his pictures, of Gleaners,--two pictures, quite mulike Millet's work of same title-also ". 1 Sifter of Colza" and "The Reapers"?

We wonte the flress in the former, the head envering. and the bare-feet. and in the latter the sabots
worn by the girls, and the recurrence of the sickle. It is said Breton's peasants have more poetry and less realism than those of Minlet. That would be a good point to discuss in a picture study club, such as could easily be formed in grades above the seventh or eighth, and certainly a fruitful exercise in a teachers' association.

The features of the land are not important in our picture, but the artist shows his skill by passing over all elements which might otherwise destroy the unity of his pieture. We have the round conical hay-stacks on the left, a portion of a house-roof is seen behind some trees, and the sun is not allowed to dominate the scene. Let the scholars discuss whether it is sun-rise or sun-set,discuss not guess. Ask questions as to the shadows in the picture, the aspect of the sky, and chiefly in rclation to the determination of the season agriculturally. For older scholars it may be permissible to enquire if Breton was as successful in treatment of landscape, clouds, etc., as persons.

To lovers of birds there is a good opportunity for a nature-study on larks-the sky-lark, hornedlark, and meadow-lark Where possible procure pictures of the various kinds, and their nests, and eggs, and note the peculiarities of habits. It is said there are two kinds of meadow-lark in Canada. The typical form is found in more or less abundance in Ontario east of Manitoba, and the western meadow lark is abundant on the prairies. The western is the larger, somewhat lighter in colour, and a beter songster. The sky lark some may have seen and heard in cages but otherwise we have ohiefly to depend upon the accounts given in books upon birds, and upon allusions in the poets. Wordsworth gives two poenns "To a Sky-lark." These may be learned by the scholars, and contrast what he says in his prem and sonnet "To the Cuckoo," only it must be borne in mind that cuckoos have been seen. The sky-lark is one of the best known British birds, and is a general favorite on account of its song. It rarely sings on the ground, but prefers to pour forth its music as it floats on the air.

Shakespeare in Romes aurd Juliet, III. 5, says.

> "The lark whose notes d, hevt
> The valuly lieaven mo high above our herda."

In "Birds and All Nature" magazine for Narch, loon, page 101, there is a prom by dat 11 .

Griggs, probably based on our picture, and entitled "The Song of the Lark."

Those scholars who have the good fortune to be açuainted with musicians may induce them to play "Little Birds" by Edward Grieg, and in some of the musical and other magazines there are articles on "Voices of Nature."

In a musical party, it would be possible to have one of the number play over the bird-notes, and then invite the company to name the bird.

But for the less fortunate teacher or scholar there is still the possibility of recalling the most cheerful notes, or songs yet heard, and observation for fuller acquaintance may be promoted.

In the N. B. school readers there is a story of a man who heard the lark sing in Australia, and his feelings are described; and Alfred East has told us how he felt under a similar experience in Japan.

Breton's Peasant hears the song and it thrills her. She desires no pity because of her arduous lot. She marches forth with her sickle like a conqueror, and one could imagine her exclaiming with Emerson; "Give me health and a day, and I will make the pomp of emperors ridiculous."

## Picture-Study Queries.

S. McF.-I cannot say what has become of the Revolntionary battleship Constitution. Some Brizish battleships have been preserved as relics but "The Old Temeraire" was not.
R. G.-Send for a copy of "Our Dumb Animals," a 16 page magazine. Teachers can have it for 25 c . published by Geo. T. Angell, I9 Milk St., Boston.

Julia S.-The fullest illustrated account of Landseer is published by Houghton, Mifflin Co., Cambridge, Mass., in the Riverside Art Series.
Beginner.-Blashfield's work has been chiefly decorative. Christmas Chimes is his best known oil painting.

Primary Teacher.-A true picture is something more than form and color. It is representation plus the individuality of the artist.

Violet.- It is not well to set pictures of anguish before young scholars. Do you think the expression of the dog in "Saved" is too painful?

Riverside.-There is an excellent illustrated account of J. M. W. Turner, R. A., in "The Canndian Magazine." August, 1905. It is brief but contains four maxd pictures.
W. E. R.-Always try to get pictures similar in conception. It calls for close observation and discrimination.

Lexicon.-See The Educational Review, JulyAug., 1905, for "reatment of "The Function of Art in Public Schools." and as to choice of subjeots for Rural Schools see p. 278 in April, I9O4. Waweig, N. B.
H. B.

## The Lark by Lake Bewa, Japan.

Alfreit Eist.
(His first published poem.)
The motive of this little story "Fold in the land of the rising sun Is à tribuie from me,-and a feeling Of thanks for a sentiment won Back from the seenes of my elilednood, A reflection of earliest days, A rush over lime and distance Through the cranks of life's rough ways. A vision of home and my mother Fla hes out like a light in the dark As I hear on this sweet May morning In Japan. the voice of the lark!
The breeze brings songs of the boatmen Which elbs with the rustle of the weeds. The water is laughing and tleshing To the mill through its ba mboo leads, While the hills acro-s the water Are changing from gold to dun As the fitful shadows wander O'er the land of the rising sun. But beyond the changing hills,
'lo my English home and birthplace, I am borne by those wild thrills, And the road and the wild green rice fields And the grey roofed cottages there, Melt into an English meadow And an linglish homestead fair. I lie again 'mid the daisice, Which bend in the soft-toned breeze That wafts the scent of the rich ripe flower. Through the branches of blooming trees.

That's my dream while the lark was singing But his song was, alas, somn done Yel the dream was fair and pleasant ln the land of the rising sunn,

January grey is here.
Like a sexton by a g ave;
February bears the bier;
March with grief doth howl and rave; And April weeps; but, O! ye Jlours!

Follow wi:h My's fairet flowers. -Percy Bysshe Shelley.

## Reproduction of Stories.

Miriam L. Drzart, Kent County, N. B.
The object of training pupils to reproduce stories is to help them understand what they read, and express what they understand. Simple stories should be tused first.

What is the central idea, what are the attendant circumstances of the leading features, and how these bear upon the former, should be clearly seen by the pupil before any attempt is made at reproduction. If necessary, a system of questions should be proposed by the teacher which will urge the children along the lines of comprehension; which will, by the subtle suggestions, expose the secrets concealed in the language employed in the story before them. Well planned questioning has, in this manner, produced results quite wonderful-opening up new vistas to the view of the pupils, enlarging the use of their powers, and engaging these young minds in what is to thens a novel and interesting work.

The questioning methorl should be continued only until the child can see clearly into the substance of the story and can distinguish main from subsidiary features. When he has arrived at this stage of development he can probably think with some system and arrange his ideas and thoughts into fairly intelligible order. He is now able to interweave his own thouglats into the thread of the story as he reproduces it, and so is in a fair way to begin to criticize, to approve or to condemn.

All this while, of course, our young friend has been exercising his powers of expression, has been turning into his own words ideas collected from the stories. Facility follows exercise.

Progress is at first slow, but assiduous practice begets ease of accomplishment, avoidance of tantology necessitates variety of expression and thus is acquired the invaluable quality of style.

The good results of reproduction will early be seen in letter-writing. Here the chikl may have (arly oppontunity to express original ideas-ideas prompted and suggestel by association of friends. family and familiar topics. Letter-writing is a large part of the writing of most people, and the only writing of many. Next to correct speaking, children shoukd be tanght lenter-writing, and bo better preparation can be made for this than reproduction.

Amost equally important with the paraphrasing of printerl stories, is the reprobluction of picture
stories. These stories of pictures may be reproduced in the same manner as other stories. Give the child a picture and by the questioning method, help him to interpret the drawing, and to describe it and discuss it,-in other words have thim translate a picture into a letter.

All this training makes the pupil more observant of what passes under his notice, teaches him to look into the heart of things, to get at the gist of matters. It will, if resolutely adhered to, bring pupils to such a stage of excellence in composition, in the art of grasping, grouping and displaying of ideas, as will brighten the material prospects of every young person who goes out into the world.

## Problems in Arithmetic-Grade VIlI.

G. K. Butler, M. A.
I. If 500 lbs . avoirdupois be bought at 75 c ., a lb., and 20 per cent duty be paid, and if they sell at $8 c$. an oz. apothecary's; find gain.

2 I,000 kilograms cost 20 cts. a kilogram and after paying 20 per cent duty scll for 15 cts . a 1 b . apothecary's; find gain.
3. How long a rope will allow a horse to feed off half an acre if he be tied in the centre of a large field?
4. If 500 gallons cost 1o cts. a gallon, and if the freight is 5 cts. a gallon, the duty 30 per cent, the gain 25 per cent, find selling price per liter.
5. How many gallons will a cylinder hold if it is to inches in diameter and 15 inches high?
6. Find area of the larger of two concentric circles when the radius of the inner is 25 feet and the width of the ring between 5 feet.

7 lind the area of a right-angled triangle whose base is 17 feet and hypotenuse 25 feet.
8. If a book is sold for $\$ 2.50$ at a gain of 20 per cent. what would have been the gain per cent had it sold for $\$ 2.25$ ?
9. Slates cost 50 cts. a dozen and after paying 20 per cent duty, are marked at such a price that the gain is 75 percent. after giving I2 I-2 per cent. (liscount; find marked price of cach.
10. Find in ac. sq. rds. sq. yds. sq. ft. sq. in. the area of a trapezoid whose parallel sides are 300 yards and 400 yards each and whose altittude is I25 yards.
II. In what time will the interest on any sum of money amount to $2-3$ of that sum at 4 per cent per rear ?
12. $\$ 800$ is divided among $A, B$, and $C$, so that A. gets as much as $B$ and $C$ together and $C$ one third as much as B ; find what each gets.
13. An agent buys flour for a retailer at $\$ 5$ a bbl . on 2 per cent commission. The freight is 25 cts. a bbl. and the gain I2 per cent; find selling price per bbl.

Answers: (I.) \$I33 1-3; (2.) \$16I.87 I-2; (3.) 83.26 feet; (4.) \$.049; (5.) 67.98 gallons; (6.) 2827.44 sq. feet; (7.) I55.8 sq. feet; (8.) 8 per cent; (9.) Io cents each; (IO.) 9 ac. ; 6 sq. rds; 8 sq. yds.; 4 sq. ft.; 72 sq. in.; (II.) 16 2-3 years; (12.) A. gets $\$ 400$; B. $\$ 300$, and C. $\$ 100$; (I3.) $\$ 5.99$ per bbl.

## Mental Arithmetic.

F. H. Spinney, Cxford, N. S.

## Areas.

Problems relating to areas are very suitable for mental arithmetic, and are appropriate for children of mearly every grade.

The first lesson in the lower grades should be accompanied by drawings on the board to represent the practical application of the principle involved. Let the teacher draw an oblong 8 inches by 6 inches, and divide it into square inclres. Then draw another one 4 inches by 3 inches, and divide it in the same way. Now ask the pupils to comnt the little squares and give them a name. They are square (?)

Afrer counting the little squares contained in several rectangles, ask the pupils to tell how many there are without actually counting them.

Now they are ready for some questions like the following:

$$
\begin{array}{ccc}
\text { Length. } & \text { Widin. } & \text { Areas. } \\
10 \mathrm{in.} & 6 \mathrm{in.} & ? \\
30 \mathrm{ft} . & 12 \mathrm{ft} . & ? \\
20 \mathrm{in} . & ? & 100 \text { sq. in. } \\
? & 9 \mathrm{ft} . & 108 \text { sq. ft. }
\end{array}
$$

A great number of such questions can be done in a few moments. Ask for "llands "p" to answer each question as it is put downi. After 12 or more questions are down, erase all tine numbers under length or width and have then replaced as quickly as possible.

The next step is to ask the pupils how many of the smaller oblongs will exactly cover the large one. This some of them will readily observe. Then make some more small ones of different sizes mil all in the class clearly see how such a problem is
solved. Then ask what large oblongs man be represented by figures like those on the board. The answer will quickly come,-black-boards, ceilings, floors, etc. Now if our large oblong is a floor, what is the smaller one? Of course, a mat.

Now we are ready for more advanced work:

| Floor. | Mats. | Number of Mats. |
| :---: | :---: | :---: |
| $12 \times 10$ | $4 \times 3$ | $?$ |
| $20 \times 15$ | $5 \times 2$ | $?$ |
| 360 sq. ft. | $?$ | 30 mats |
| $?$ | 12 sq. ft. | 20 mats |
| $40 \times(?)$ | $10 \times 8$ | 10 mats |

From such problems as these the teacher can proceed to carpeting floors, papering, etc. In carpeting questions it is well at first to consider pieces of carpet 3 feet long and of varions widths:

| Floor. | Pieces of Carpet. | No. of Picces. |
| :---: | :---: | :---: |
| $30 \times 20$ | $3 \times 2$ | $?$ |
| $21 \times 12$ | $3 \times 3$ | $?$ |

After twelve or more stuch questions are placed on the board any one of the above columns can be erased, and the numbers supplied.

Thus:
Floor. Pieces of Carpet. No. of Pieces
$30 \times 20$ 3 $\quad 3 \times(?) \quad$ IOO pieces.
$21 \times 3 \quad 3 \times 3$ picces.
Pupils from grade IV to grade VIII will profit by a long drill in such problems as the above. They prove far more interesting to pupils of grade IV than such problems as to find the divisor when the dividend, quotient and remainder are given, which questions, by the way, are about as useless and monotonous as anything that could be imagined. In the above problems it is often required to find the divisor in a much more practical and interesting way.

A writer in the Springfield Republican recommends the iollowing parts of the Bible as secially fitted for reatimy when one is in a pessimistic moorl:
If you have the "blues," read the 27th porim.
If your pocket-book is empty, read the 37 th psalm.
If people seem unkind, read the tith chapter of John.
If yous are discouraged about your work, read the tersh psalm.
If you are all out of sorts, read the 12th chapier if Hebrews.
If you are losing confidence in men, reed the ith chapter of I Corinthians.
If you can't have your own way in everything, keap silent, and read the third chap'er of James.

## Boyle's Law

John Wadnell, Ph.D., School of Mining. Kingston Last summer by far the greater number of the papers at the examination in Physics of Grade XI. in Nova Scotia contained an answer to the question on Boyle's Law and I think I am within the mark in saying that in fully ninety per cent there were two errors. For one of these errors the textbook might be held responsible because the textbook is not perfectly clear; for the other error the textbook was in no way to blame. I shall consider the latter error first.

The proof of the law usually given consists in showing that when the pressure on a quantity of air is donbled the volume of the air is halved. The air is enclosed in the short arm of a bent tube the long arm of which is open to the atmosphere. Mercury is poured in at the open end and is adjusted so that the level is the same in both arms, thus ensuring that the pressure on the air in the short arm is exactly that of the atmosphere. If mercury be now poured into the open end its weight will exert a pressure and compress the air in the short arm; hence the mercury will rise in the short arm but not so rapillly as in the long armbecause of the resisting air. If sufficient mercury be poured in a time will arrive when the mercury in the long arm is thirty inches higher than in the short arm. The pressure in the short arm is now greater than it was before by a pressure due to a height of thirty inclies of mercury. But the pressure of thirty inches of mercury is the pressure excrted by the atmosphere; hence the enclosed air now has the pressure due to the atmosphere and the pressure of the mercury which is equal to the atmospheric pressure, therefore the pressure is equal to two atmospheres. It will be noted that the level in the long arm is thirty inches higher than in the short arm but as the level in the shont arm is higher than it was at the begiming the level in the long arm will ie. by the same umount, more than thirty inches higher than it was at the begiming.

Now this is just where the error came in. By far the greater number of examinces after making the first adjustment said to pour in thirty inches of mercury, or to pour in mercury till the level is 30 inches higher than before not realizing that it is the differenee of height in the two arms that must be thisty inches.

The texthonk after giving the proof correctly as
regards pressure says: "From this experiment we learn that at twice the pressure there is half the volume while the density and clastic force are doubled. Hence the law:-The volume of a body of gas at a constant temperature varies inversely as the pressure, density, and elastic force." In the proof nothing was said about destiny and elastic force ; doubtless their relation to pressure is discussed elsewhere in the book. Of course what is meant $1 s$, that the volume varies inversely as the pressure; or, what is the same thing, it varies inversely as the elastic force. The almost universal opinion among the examinees was, however, that the volume varied as each of these factors, and those whose knowledge of mathematics was rather more extended than usual made the natural deduction that the volume varied as the product of the three factors and wrote an equation.

## Why Some Birds Hop and Others Walk.

(Sent by Miss G. F. Crawford, Riley Brook, N. B)
A dittle bird sat on a twig of a tree,
A swinging and singing as glad as could be,
And shaking his tail, and smoothing his dress,
And having such fun as you never could guess.
And when he had finislred his gay little song He flew down in the strect and went hopping along, This way and that way with both little feet, While his sharp little eyes looked for something to ea:. A little boy said to him: "Little bird, stop, And tell me the reason you go with a hop, Why don't you walk, as boys do and men, One foot at a time, like a dove or a hen?" And the li:tle bird went with a hop, hop, hop; And he laughed and he laughed as he never would stop, And he said: "Little boy, there are some birds that talk And some birds that hop and some birds that walk. Use your cyes, little boy; watch closely and see What little birds hop, boilh feet just like me, And what little birds walk like the duck and the hen, And when you know you'll know more than some men. Every bird that can soratich in the dirt can walk; Every bird that can wade in the water can walk; Every bird that has claws to catch prey can walk; One foot at a lime-that is why they can walk. "But most little hirds who can sing you a song Are so small that the: r legs are not very strong To scratch with or wade with, or catch things-that's why They hop with both feet. Little boy, good by."
[The exceptions to this rule are rare. The rule is geitcrally correct, and so simple as easily to be remembered.]
-Selected.
Reputation is wh: t men and women think of us; character is what (rod and the angels know of us.-Paine.

## Old-Fashioned Ihings.

(Sent by Miss Glendine Brewster, Albert Co., N. B.
Old-fashioned things! How tenderly we love them I Old-fashioned haunts, so distant and so near! How gently, fondly, Memory speaks of them;

How wholesome, sweet and restful they appear. Within this age of bustle, fret and hurry, How grateful it would be if we had wings To fly to boyhood and forget our worry Amid old-fashioned things.

Old-fashioned, from modern sins untainted; Old-fashioned chambers, roomy, cool and high;
Old-fashioned paintings with their faces sainted;
Old-fashioned downy beds on which to lie;
Old-fashioned wares, with no cheap imitations; Old-fashioned folks that practise what they preach;
And, free from all our slangy innovations, Old-fashioned forms of speech.
Old-fashioned love that knows no turn or changing, But to its plighted word is ever true;
That does not over all the world go ranging In search of victims and sensations new.
Old-fashioned brides with roses in their faces; Old-fashioned modesty in womanhood;
Old-fashioned firesides that are sacred places; Old-fashioned love of good.
Old-feshioned honesty, forever spuri ing What bears the st:gma of muhallowed gain; Old-fashioned justice that will brook no turning And on whose robe there can exist no stain; Old-fashioned frugal, plain and simple living. And, though they seem jusi now à ir fle odd. Old-fashioned prayer and worship and thanks giving-Old-fashioned faith in God.

I welcome progress. Let the world move onward Until the human cycle is complete,
But while we kecp our minds and faces dawnward, Let us not lose the wholesome and the sweet.
There is so much of loyalty to duty Within the past, that all my spirit sings The sterling worth, simplicity and beauty Of good, old-fashioned things.

Constable-And the prisoner said, washup, as how somebody had blown the gaff. His Worship -What does that mean? Constable-Why, given him away, your washtup. His Worship-And what may that mean. Constable-Why, rounded on him sir. His Worship-I am still ignorant of your meaning. my man. Constable-Why, yer washup, he meant as how somebody had peached on him: squealed, yer washup. His WorshipWhat language are you speaking, constable? Con-stable-Brixton '111, your washup."-London Telegraph.

## The Tale of Twelve.

We are twelve sisters gay!
Our number isn't small,
But in our ample home
There's room enough for all!
In temper and in taste,
We do not all agree,
So we have been arranged In companies of three.
D., J. and F. lead off,

In wild and merry sport;
They skate and slide and coast,
And build the snowy fort!
Two Ms. and A. come next,
They scold and sulk and smile!
And when they've done their work
They play a litle while!
Then come two Js. and A.-
A sunny happy crew!
Warm-tempered to be sure,
But loving, kind and true!
Then S. and O. and N.-
Nos: favored ones of all!
They play when nuts are ripe,
And when the apples fall!
Now, children, who are we?
Can anybody say?
We've danced and played with you
Fuli many a happy day.
-Selected.

## Punctuality.

The most obvious method of teaching Punctuality is sometimes ignorerl. That is, let the teacher set the example by being punctual herself. We do not mean that she should come to scimol at the proper time-of course, she does that-but that every recitation begins exactly on tine, that change of classes be managed quickly and promptly. that time from onc recitation be not stolen for anober When the programme for the day lias once been arranged, see that the work begins promptly, not five or six minutes after the schedule time. Let each recitation begin on the minute, insist upom instam obedience to sigmals, and to not take time from the intermission for reciations or reproving the class. You will son find that your pupils are unconscionsly growing more prompt and attentive, and also that Were is time for everything to the teacher whos kn. mis how to economize the mintwes.-Exchange.

## A Birthday Party.

Jean lived in the country near some big woods. She was the only child in the bouse. And there were no other little girls for miles around.

When Jean was seven years old she had a birthdily panty. She had so many guests she couldn't count them. She set the table out of doors on the crust. There were fresh bread-crumbs, from her big birthday cake. The gnests came and helped themselves. They were very noisy. They chattered and scolded. Can you guess who they were?

First came some blackbirds. Then up dopped a dozen hungry chick-a-dees. Next, down flew five -pretty bluebirds just back from the south. When she saw her last guest, Jean clapped her hands. He was a round, bright-eyed Robin Redbreast- the very first one she had seen that spring!

The birds ate up every single crumb. Then they chirped their gay little "Thank yon" and Hew away. Jean said it had been the best birthday paniy anyone ever had.-Primary Education.

Probably a great hymn never had a more humble origin than Onward Christian Soldiers, which is one of the most popular of our modern hymms. In the /Ielineator Allan Sutherland writes: "A great school festival was to be held in a Yorkshire village on 11 hit-Alonday, 1865 , and the scholars of Torbury Pridge school over which the Rev. Sabine Bar-ing-Could was curate, were invited to attend. As the place of the celebration was some distance away the minister thought it would be an excellent plan to lave his scholars march to the singing of an appropriate and stirring hymn. Fortunately for our bymnology, he could find nothing in his song books suitable for such an oceasion, so from sheer necessity he sat down the Saturday evening preceding the celebration and composed the great processional hymn, little dreaming that he had produced that which would be world-wide in its uscfulness and make his name a houselold word. Baring-fould is an atthority on many subjects, and is a volummous writer, laving published nearly one hundred volumes. The few lines hurriedly composed on a Saturday evening as a marching song for a hand of little children will doubtless give to his name greater fame that all the books he has ever written.

## The Way to be Happy.

A hermit there was, and he lived in a grot, And the way to be happy, folks said, he had got; As I wanted to learn it, I went to his cell, And when I came there, the old hermit said: "Well, Young man, by your looks you want something, I see; Now tell me the business that brings you to me." "The way to be happy, folks say, you have got; And wishing to learn it, I've come to your grot. Now, I beg and entreat, if you have such a plan, That you write it me down as plain as you can." Upon which the old hermit, he went to his pen, And brought this note when he came back again: ""ris being and doing and having that make All the pleasures and pains of which mankind partakz; To be what God pleases, to do a man's best, And to have a good heart, is the way to be blest."
-Lord Byron.

## The Purpose of Manual Training.

Manual Training should be rational from beginning to the end, like the theorems in geometry. In geometry the main end sought is not a collection of mathematical facts, no matter how important these facts are; the most valuable thing for the student is an absolnte comprehension of the methods of geometrical reasoning. It is so in educational toolwork. The form of model to be executed does not represent the value of the training; the valuable thing remains in the boy's head and hand; the exercise and tools are indispensable means by which that valuable training is secured.

The object of manual training is mastery-mastery of the external world, mastery of tools, mastery of materials, mastery of processes. Many mistakes have been made, arising from the wrong notion of the object of manual training. Hence in one locality manual training has a strong tendency to run into trade training; in another it runs into art work; in another it runs into the factory idea and aims at production rather than education. Some people fancy that nanual labor is the same as manual training.

The teacher of manual training should be cxpert. Not merely an expert carpenter, or machinist, or a finished draughtsman, but he must be well educated and an accomplished teacher, and he must be skilful in the use of his tools; above all he must understand exactly what he is there for, what manual training is, and what he is expected to accomplish. If possible he ought to have had a thorough course in a first-class manual training school supplemented by a college or technical course. In this way, by the selection of a good teacher, by the
payment of a good salary, and by due recognition of the work of the programme of the school, manual training will have the same dignity that other subjects have and the school will succeed.-Calvin M. Woodward in N. Y. Outlook.

## Lines in Season.

To lay up lasting treasure
Of perfect service rendered, duties done In charity, soft speech, and stainless days: These riches shall not fade away in life, Nor amy death dispraise.
-Edwin Arnold.
A laugh is worth a thousand groans in any market.
-Charles Lamb.
But words are things, and a smail drop of ink,
Falling like dew upon a thought, produces
That which makes thousands, perhaps millions, think.
-Byron.
The Golden Rule is not always the rule of gold.
It is better to trust and be cheated tham never to trust.

> That I spent, that I had;
> That I kept, that I lost;
> That I gave that I have.

One today is worth two tomorrows.
Talk and tattle make blows and battle.
Big things are done by help of little things.
Remember, three things come not back: the sped arrow, the spoken word, and the lost opportunity.

> The year's at the spring
> And day's at the morn; Morning's at seven; The hillside's dew-pearled; The lark's on the wing; The suail's on the throne God's in His heavenAll's right with the world!
> $\quad$-Browning, Pippa Passes.

Better pat an animal than slap it.
The workshop of character is everyday life.-Babcock.
It is not what stays in our memories, but what has passed into our charcters that is the possession of ur lives.--Phillips Brooks.
Good character is property. It is the nobles: of all pos-sessions-Samuel Smiles.

If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest.-Bcnjamin Franklin.

A good name is rather to be chosen than great riches, and loving favor than silver and gold-Bible.

## Who Loves the Trees Best?

Who loves the trees best?
"I," said the Spring.
"Their leaves so beautiful
To them I bring."
Who loves the trees best?
"I," Summer said.
"I give them blossoms, White, yellow, red."
Who loves the trees be:t "I," said the Fall.
"I give luscions fruits, Bright tints to all."
Who loves the trees best? "I love them best,"
Harsh Winter answered, "I give them rest."

## National Hymn.

The report that Switzerland has decided to change her national anthem, owing to the identity of its melody with that of the national anthems of Prussia and of Great Britain, reminds me that, although the words of the French national anthem, "La Marseillaise." are by Rouget de l'Isie, very few people are aware that the molody is German, and that, as shown by the late Castil Blaze, the most eminent musical critic of the nineteenth century, the air was borrowed by Rouget de l'Isle from a collection of German religious melodies. The Austrian national bymn was composed toward the latter end of the eightenth century by Francis Joseph Haydn, though whether on his own initiative or by imperial order is not quite certain. These national anthems, contrary to general belief, are a relatively modern institution, for until the eighteenth century no country possessed a national anthem of any kind. One of the first nations to adopt a national anthem was Great Britain, and considerable pains were taken to emphasize the fact that it was King George I., and not the Jacohite l'retender who was meant. A preposterous attempt has been made to prove that the melody of "Cond Save the King" was a composition of lord I Ialifax's illegitimate sm, Henry Carey, but the air is a very much older one, of a religions order, and was adopted almost immediately afterwards by Prussia and by Russia, Switzerland and America following suit later.

It the end of the eightcenth century there were at least five muntries-Great Britain, Prussia, the

United States, Russia and Switzerland-using identically the same melody for their national anthem. Emperor Nicholas I., at the time of the Crimean War, decided to cast aside a national anthem borrowed and imported from the enemy, and to substitute for it a genuine national anthem of native composition. The present national anthem of Russia is probably the only one that was ever adopted as a result of an open competitionlike the legendary tournaments of the bards of the Court of Thuringia, of the mastersingers of Nuremberg, and the violin makers of Cremona. The musical committee of selections rejected all the anthems sent in but two, the respective merits of which were left for the Emperor to determine. One was by Glinka, the renowned composer of "Life for the Czar." The other was by Lyoff. Glinka's hymn was thoroughly Russian in character, and in the form of a march. Lyoff's was more solemn, but much less original. He knew, however, that a high military style of instrumentation would appeal to the Inperial ear, and his drums and trumpets decided Nicholas against all claims to recognition on the part of the more artistic Glinka. Nioholas, however, cannot he said to have made a bad choice. Poth works were good, and if he preferred the more demonstrative of the two it was probably because he knew so well the tastes of his people.Mclall's Magazine.

## Guess the Names of the Rivers.

(iuses the mame of the river that serses to hold fast. 'The river that grows on a tree.
The river where 0 xford and Cambridge compete.
The river hat's found in the sea.
The river that actress and soldier both use.
The river that crawls on the ground.
The river that puppies and kittens imbibe.
The river where breezes abound.
The river up when fulten's stemboat first atiled.
The river that makes the heart glad.
The river whase current drains five mighty lakes.
The river with which you catch shad.
the river tha:" fried with a juicy beefacak.
The river Rome's braves unce swam.
the river whose nathe is a ligh-hearted Scot.
The river rpheld liy a ram.
batck of the loaf is the smow flour,
And lack of the flour the mill,
Ane loack of the mill it the wheat and the shoner.
. Whe the ston and the leather's will.
-M. D. Batrinck.

# A Tale of a Bonnet 

Part I. The Bonnet.
A big foundation as big as your hand; Bows of ribbon and lace;
Wire sufficient to make them stand;
A handful of roses, a velvet band-
It lacks but one crowning grace.

## Part II. The Bird

A chirp. a twitter, a flash of wings, Four wide-open mouths in a nest; From morning till night she brings and brings, For growing birds they are hungry thingsAy! hungry things at the bast.

The crack of a rifle, a shot well sped;
A crimson stain on the grass; Four hungry birds in a nest unfedAh! well, we will leave the rest unsaid;
Some things it were better to pass.

> -Our Dumb Animals.

## Current Events.

H. M. S. Dreadnaught, which has just been launched at Portsmouth, England, is the largest and most powerful battleship atloat. Work upon this ship was begun in October last, and she will probably be ready for service by the end of this year, the rapidity of the work being not the least remarkable feature of her construction.

Sir Frederick Treeves is quoted as saying that of the British soldiers who went to the relief of Ladysmith, during the South African war, those first to fall out from fatigue were not the fat or the thin, the young or the old, the short or the tall, but those who drank. So well marked was this fact that the drinkers could not have been more clearly distingui hable if they had worn placards on their backs.

The Slaah of Persia has yielded to the demand for a national assembly. The mullahs, or Mohammedan priests, were at the head of the movement for this reform.
The statement that the Danish explorer, Mikkelsen, who is plaming to sail to the west of the Perry Islands in search of unknown land, will plant there, when he finds it, the tlag of the United States, reminds us of the fact that the United States territory of Alaska is nearer to the North Pole than any part of our mainland west of the peninsula of Boothia.

King Cliristian IX.. of Demmark, died on the 29th of January; and his bedy has been laid in the old cathedral at Roskild, the ancient cepital, where Kings of Denmark have been buried for nearly a thousand years. He is succeeded loy his eldest son, who takes the title of Frederi:k V1II. King litederick is a brother of our Queen, of the 1) owager limpress of kussia, and of the King of Greeien, and father of the new King of Norway. His eldest son 1: mow the Crown l'rince Christian. The names of (hristian and berelerick have beet borne by the Danish "vereign alternately for the lant fome hamelred years.

It is not generally known that King Edward holds a diploma in forestry, a science which, by the special wish of his father, he studied in the forestry school at Nancy, France, and also in Germany.

The most elaborate celebrations in honor of the Prince and Princess of Wales have marked their progress in India. In Burma, the railway to Mandalay was lined by a double row of men sixty feet apart for a distance of nine:y-two miles. As the train passed through in the night, each man held up a lighted paper lantern at its approach, making a continuons illumination of the way. Trifling in themselves, these celebrations tend to show the feeling of the Indian peoples toward their future Emperor.
It is annoumsed that the elections to the Russian national assembly will take place April 7th; and that the issembly will meet at $\mathrm{E}_{\mathrm{t}}$. Petersburg April 28ih. In the meantime, the disorders throughout the empire have in a measure ceased; and, by the time the duma assembles, the people may be somewhat prepared for parlizmentary government.

The conference on Morocco has not yet reached the end ot its labors, and there scems to be an irreconcilable difference between the French and German demands. France wants the Moroccan police placed under the control of French and Spanish officers. To this Germany objeits, and France may possibly withdraw from the conference The Sultan of Morocco, as might be expected, objects to any foreign control ; but, as his authority just now extends to but a small area of the vast territory over which he claims to rule, his wishes may not be greatly regarded. Germany and France are also mable to agree upon the question of financial control, the letter claiming that French interests should be recognized as of mast importance, is British interests have been recognized in Egypt.
A treaty providing for the commercial union of Servia and Bulgaria has aroused the displeasure of Austria, and non-intercourse between Austric and Servia is threatened. This, with a serious political crisis in Austria-Hungary, las made the Danube and Balkan region again the sceae of movements that threaten the peace of Europe.

Rumors that the withdraw: of Russian troops from Manchuria, under the terms of the treaty of Portland, is not being carried out in good faith, and that Russia is occupying Mongolia, together with renewed rcports of anti-foreign uprisings in China. throw doubts upon the probability of continued peace in the Far Eest. The United States is openly s rengthening its position in the Philippines in preparation for a war with China.

That the news of the day shonld be warlike, while aill the great nations of the world are nominally at peace, is a sad commentary upon our twentieth century civilization. It is pleasant to turn to other matters, less exciting, but not less important. The new respect for China, not as a fighting power, lut as a civilized country, is worthy of note. Her great antiquity, her immense pop"lati $n$, her remarkable morality, and her love of peace; the vigor of her people as a race, their toleration and eelf-restraint; even the wisdom of her rulers and the worih of a systen
oí government which has brought all this about, are begiming to be recognized as elements of greatness that entitle her to a high place among the nations of the world. That China should have semt statesmen to the United States in the interest of peace, while the latter country is preparing for war over trade restrictions, is much to !er credit." Let us hope that they will carry home with them both peace and honor.

The new President of the French Rcpublic, M. Fallieres. has entered upon the duties of his office. His position in the scheme of government is more like that of the British King than it is like that of the President of the United States, in that his official acts are controlled by responsible ministers of statc. There is a French saying that "the King of Great Britain reigns, but does not govern; :he President of the United States governs, but does not reign; the President of the French Republic neither reigos nor governs." Nevertheless, the French presidency, like the crown in a parliamentary monarchy, maintains the legal continuity of the administration through all ministariá changes, and so tends to stability and security in times of popular excitement, when other forms of government may fail.

Capt. Bernier is still bent upon adding the North Polle *to our Dominion, if there is land there $t$, occupy. Ile wishes to have the government steamer Arctic placed it his disposal for that purpose; his plan being to go north through Beliring Strait, and drift across the pole to dic shores of Greenland.
More than a million people are suffering from the fami:te in the northern provinces of Japan. Relief is being sent to them from different parts of the world, while their awn government is doing all it can do for them. From Canada, $\$ 25.000$ wortly of wheat flour will loe sent as the gift of the Canadion government.

King Edward's nephew, Prince Arthur of Connanght. acting as the King's special representative, has invested the Japanese Emperor with the insignia of the Order of the Garter. The prince will return from Japan by way cf Canada.
It has been decided to construct a railway acros: British North Bornco, to conmect sea ports on the east and west coasts.

## School and College

A social was held in the hall at Riverport, Limendsurg Co., N. S., under the auspices of the teachers, Miss L. A lancy, Niss G. E. Strum and Miss A. B. Parnell. 'l!e amount realized was $\$ 63.79$, which will be donated to school purposes, zmong which may be mentioned chemicals and a library.

A school supper was held at Oxford, N. S., on Saturdav evening, February 17, and the handso pe sum of $\$ 6450$ wa: realized. to be devoted to library purposes. The sclu, 1 has had the nucleus of a library for some years, but it is quite inadequate to meet the demands maxle on it by the pupils and the pulblic. The Oxford people are deeply interested in school matters and always give material ent
couragement when a call is made on them, such as is recorded above, to help the teachers and pupils in a good work.
Prince Edward Island is the smallest and least populous of the provinces. Yet it will have next year four Rhodes scholars at Oxford University. Mr. Mclead, Who has been chosen by McGill University, is the second Island man elected this year.
The death of Mr. George A. Coates, a veteran teacher of Kent County, tork place recently at the home of his son. Dr. Coates, at Rexton. Mr. Coates taught for many years the Superior school at Buctouche. Many of the business and professional men of Kent Connty owe their training to him and all cherish pleasant memories of the interest he always took in their welfare and progress.

The compulsory attendance law in Missouri is a success. Fully 60,000 more children are enrolled in the schools rf the state than were enrolled the first month last year. The average daily attendance last year was aliout a half million. This year it will be 600,000 .

## Book Reviews

First Lessons in Botanv. By C. A. Cooper, L. 1. A Flexillue Cloth. Pages to Price 6d.
Gives the few prominent features and ontlines of plant--tudy in a clear and interes:ing manner.
l'ine First Science Book. By Lothrop D. Higgins. Cloil. Pages 237. Illustrated. Majling price 75 cents.
Although this bouk professes to treat of the leading principles of physics and chemisisry, it dees it in a different way from the usual beginner's text books on these subjects. The pupil is led to become an investigator at one" by a proces of simple experimenting with common plenomena and a reference to familiar facts and happenirggs. The inlnstrations ane many and are admirably chosen.
Blackboard and Free Arm Drawrng, By Herbert 11. Stephens, A.C.P. Clotl. Pages 127. Price 4s. .id. Blackie \& Son, London.
This work exhibits directions for lolackboard sketches by the teacher; the analysis of figures containing straight and curved lines; miscellaneots skethes of animels, an- $^{\text {and }}$ cluting birds, reptiles and fish, sleells and butterflies; tress. keaves, flowers and fruit; specimens of ships; maps and historical illustrations. The work is well execn ed and the examples skilfully selected.
Summary of Englsish Histoky. By Norman L. lirazer, B.A. Cloth. Fages 216. Price 2s. Adam and Charles Black, London.
This is a very different summary from a mere rehash of chronological events. It is a coherent method of fixing the main facts and principles of britinh history, derived from contemporary writers and documents, illustrated with maps ant engravings. A literary finish is given by the discussjon of spectial topie- and the biographics of cminent ment.

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A First Year's Frencla Book on the Onal Method. By A. H. Smith, M.A. (Londen). (loth. Pages 139. Price 1s. 6d. Blackic \& Son, London,

We are glad to see a text book for beginners in Frencl, written entrely in that lanjuage. Tlie auther has succeeded in making the book interesting, 1 trains the eat as well as the eye; and wili a grod teacher the acquircment of an accurate working knowledge of the

French Language should proceed pleasantly and expeditiously.
Sturies from Grimm. Eidited by A. R. Hope Moncrieff. Cloth. Pages 122. Price 1s. 6d. Blackie \& Son. London.
This is a neat volume containing twelve "fireside" tales of the Brothers Grimm. They are well adapted for elementary studen.s in German. The brok is provided with vocabulary and notes.

In Blackie's English school texts, some of which we have referred to befcre, we have received the following: Prescott's Conquest of Peru, Mottle-Fouque's Sintram and His Companions, Sir Thomas Roe's An Embassy to the Great Mlogul, Josephus's The Siege of Jerusalem, The Adventures of Montluc, Adventures of Capt. John Smith, De Quincey's English Mail Coach, A Sojourn at Lha-ssa, Travels in Thibet. The Voyage of Capt. James. These are all convenient pocket ediions, chiefly of intenesting travels and exploration, bound in flexible cloth, of good paper and clearly printed, more than one hundred pages of matter to each volume, and sold at the low price of 6 d. ench. Blackie \& Son, Londen.

Blackie's Story book Readers conlain "The Lost Fairy" and "The Sheep of the Mountzin," price id. each, "Sasha the Serf," price 2d., "Do your Duty," price 3d. The books are in paper covers. illustrated, and contain excellent and bright stories for lit le people. Blackie \& Son, London.

Educational Review Eupplement, Fpril, 1906.

"PREPARING FOR ANOTHER SEASON."


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G．U．HAY，
Editor for New Brunswick．

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St．John．N．B．
E 月 § Cer．
Hwake，thou wintry Earth－ Fiing off thy sadness！
Fair vernal flowers，laugh forth Your ancient gladness！

Christ is risen
－Thomas Blackburn－An Easter llymm．
The picture this month is a representation of native trees from two pictures by Sir William Van Horne of Montreal．It is something in the life of at busy man of affa：rs to have a taste－and cultivate it－for nature and art．The skilful delineation of trees and the larger fungi，in which Sir William
has excelled，has not interfered evidently with business but has given a rare pleasure to his event－ ful and busy life．

The Roman Catholic church loses one of its ablest men in Archbishop O＇Brien，who died in Halifax， March 1oth．He always manifested a strong inter－ est in educational affairs which he actively promoted by his ready sympathy and co－operation．In addi－ tion to his engrossing duties as a churchman，the great questions of the day，literature and political economy found in him a devoted student．He was an active member of the Royal Society of Canada and its president for the year $1896-97$ ．

Our readers will find in this number appropriate material for Friday aftermoon excreises in April， and for Easter and Arbor Day．No formal pro－ gramme is offered for the observance of the latter． The day，should be devoted to a general cleaning and adormment of the school premises；the planting of trees and flower beds；lessons and recitations on trees and other plants，ending with a school enter－ tainment in the afternoon to which parents and friends should be invited，and for which careful preparation should be made during the preceding weeks．

A subscriber asks us to publish a map of the new provinces of Alberta and Saskatchewan．To do this adequately with portions of the surrounding provituces and territories would take more space than can be spared in this number．Why not con－ sult our advertising columns and get a new map of Canada？If the trustecs cannot afford to help，a small concert on Arbor Day will realize more than cnough．

A friend sent us in February a twig of willow collected the first week of that month with the white catk＇ns half unfolded．But here it is the first week in April and no more progress has been made in bud unfolding．It is useless to look for spring in February or March in this comntry．

A gentleman who is deeply ooncerned about the greater possibilities of education writes as follows to the Review: "There is still a missing link in our educational system, considering as we must the thousands who have left school too soon, or are about to leave school. The scholars from good homes are cared for; the whole system is articulated from primary school to univensity for the minority; but can we not have evening rural sohools, industrial or atherwise? Can nothing more be done for thousands of illiterate youth in these provinces? Denmark has one hundred high schools for adults!"

Church Work is now published in a new form and under a new editor and management. It is issued fortnightly at North Sydney, C. B., by Rev. C. W. Vernon and is an eightit-page journal neatly printed on smooth white paper, with numerous clear idlustrations, and carefully written editorial and owher matter. We heantily agree with the announcement made by the former editor in the first number, that if such a paper does not succeed "the Church people of the Maritime Provinces should be heartily ashamed of themselves."

Talking with a commeroial traveller not long ago he said he attributed his success in selling goods not so much to his industry and push as to his entire abstinence from intoxicating drinks. He said it was well understood in these times of fierce competition in trade, that it was not business-like for any man to drink. Surely this is a good temperance lesson for young people. Success in business or in any profession must not be trifled with by yielding to the temptation to drink.

There is a dearth in too many of our schools of reproductions of work of art-whose that are truly beautiful and at the same time suitable. More of music, art, poetry is mequired to round out the natures of young people. There is no real sturdy of music except in a few favored schools; art is entirely ignored, or confined to the placing of a few pictures on the walls; poetry is robbed of all pleas-ure-giving because pupils are required to analyze it too persistently. The subjects of our school course are addressed to the intellect and to the memory rather than to the cultivation of taste, or the awakening of a desire for real culture. Are our teachers preparing themselves to be the leaders of the reform that must come, or will the leaders spring up from outside their ranks?

## Recent School Legislation.

Several changes and additions to the school law have been made both in the Nova Sootia and New Brunswick legislatures during the recent sessions. Many of these are important.

In New Brunswick the attendance of children at the public schools may be enforced by.those districts which vote to adopt compulsion. This is the mildest form of a compulsory act; but it is on a par with some school degislation of the past. Before free schools were sanctioned by law in the province, the ratepayers of a district had the option to assess themselves for the support of schools.

Some of the amendments to the New Brunswick school law, it is gratifying to record, are progressive, and coupled with what has been done in recent years for the introduction of consolidated schools, manual training, nature study and agricultural education may be looked upon as decided steps toward improved educational facilities. The amendments provide that districts may assess themselves for free text books; that consolidated schools may have five acres of land instead of one; that teachers and boards of health shall hereafter look after vaccination certificates; that grammar school grants may be transferred from one seation of a county to another after a lapse of ten years; that teachers shall have additional powers to preserve order and protect pupils from interference by outsiders; that sclrool districts, failing to maintain a school in operation for two successive terms or failing to have the children conveyed to a school in a neighboring district, shall be annexed to a contiguous district. It is to be hoped that the latter especially will be vigotously enforced.

The government also has the authority to compel districts to unite and form a consolidated school if it is thought that such a union shall advance the educational interests of the community.
It is to be regretted that the New Brunswick government could not see its way clear to improve the salaries of teachers, in accordance with the petition presented by the Teachers' Association. It is held by some that an increase by the government would be met by a corresponding lowering of the local salaries paid to teachers. It is not too much to ask that districts take the initiative in increasing teachers' salaries and many are now doing so.

The fact should not be lost sight of, however, that in New Brunswick special grants are now made to over fifty sclrools which include manual training and related subjects in their course of study under
teachers who have fitted themselves to teach these branches. Grants of fifty dollars a year are given to teachers, without regard to sex or class, who have classes in manual itraining. Thirty dollars additional is given to those teachers who conduct a course of nature-study with a school garden. The superior schools which have been fostered largely under Dr. Inch's regime, are scattered all over the province, and the teacher, whether male or female, receives an annual grant from the government of $\$ 250$. These, with the increase in the number of grammar school teachers, who each get $\$ 350$ from government, show that there are rewards for industrious and ambitious teachers.

The Nova Scotia government has decided to increase the grants paid to teachers from the provincial treasury. Hereafter teachers shall receive the following amounts annually: Class $\mathrm{D}, \$ 60$; Class C, $\$ 90$; Class B, $\$ 120$; stuperior soliool, $\$ 150$; Class A, $\$ 180$; Class A in a high school of at least three departments, $\$ 210$. As we understand it, these grants are made equal to both sexes.

It will be interesting to compare them with those marle to New Brunswick tcachers. In every case the average grant to the latter is higher. In New Brunswick the teacher of a grammar school receives $\$ 350$ and the teacher of a superior school $\$ 250$ yearly, whether male or female. First class hicensed teachers corresponding to Class B in N. S. receive,male, $\$ 135$; female, $\$ 100$. Second class, corresponding to C in N. S.,-male, $\$ 108$; female, $\$ 81$. Third class, corresponding to D in N. S.,-male, $\$ 81$; female, $\$ 6_{3}$. It may be said that the proportion of teachers who have received normal school training is less in Nova Scotia than in New Brunswick.

The teachers' pension law which provides for retiring allowances for teachers of long standing and for those who have become incapacitated from any cause is an cncouraging and progressive sign. We shall deal with this more fully in a future number.

In Nova Scotia it is proposed to appoint an advisory board to assist the Council of Public Instruction, in what way or to what extent has not yet been made clear.

## The Influence of School Gardens.

Mr. Geo D. Fuller, director of the Macdonakd Rtural schools for the province of Quebec writes an interesting article on The School Garden and the Country School in the March ntumber of the Notawa Naturalist. We have only space for the concluding
paragraph of a paper that we should like to see in the hands of every country teacher.
As the school environment has been improved, there has been a marked change in the moral tone of the school. The pupils' attention has been turned to a consideration of the beautiful to the exclusion of many baser thoughts, and the resulting moral culture has found expression in more ordenly behavior. A smooth bit of lawn and a lawn mower have proved themselves aids to good discipline, for the phay hours are more rationally enjoyed on well kept grounds than on the old rubbish-littered premises, where the chief joy was often found in working greater destiuction. In some schools there has been a very noticeable change in the attitude of the pupils towards the school roon and grounds, and they now take pride in beautiful surroundings and care for them where formerly they sought but to make desolation more hideous. Some of the pupils have been led to attempt flower and vegetable plots at their own homes, alid it seems hard to over-estimate the better training for good citizenship which pupils receive in such sclools where school gardens liave broadened the educational hoizon and improved the school environment so greatly.

An organization called the Canadian Alpine or Mountain Club has been formed at Wimmipeg, the object of nwhich is to explore the virgin valleys, glaciers and higher ranges of the Rocky mountains, in order that their wonders and beauties may be better appreciated. The Club will have climbers and non-climbers among its nembers, the first to do active work in ascending the loftiest of the Rockies, the second merely to have an interest in the less strenuons objects of the organization. Success to it. The boys and girls in every section of Canada should have such chubs, the object of which would be the investigation of the valleys, hills and monntains of their neighborhood.

It is found that trees play a very important part in making the work healthful. We must not think trees are here solely to cut down for fuel or timber. Vegetation is the means by which the atmosphere benefits the earth; it is the eanth's good friend. It is seen that where the trees have been cut off the winters are colder and the summers hotter. The beautiful brooks and creeks disappear in the summer; the springs that catnsed them were sheltered by trees; these removed and the spring is dried up. D'seases of trecless countries are unknown among forest dwellers. These things have caused people to plant trees whenever possible.-Ex.

Your Review licips me very much with my work and I look forward to its coming with pleasure. $-G . C . C$.

## Our Native Trees.-IX.

By G. U. Hay.

## Evergreens.-The Hemlock.

The hemlock (Tsuga canadensis) is one of the most graceful of our evergreen trees. When growing where there is plenty of space its lower branches are often long and straggling, but when found in the forests where its roots penetrate into rich mould, the formation of centuries of decayed leaves, it is of a majestic appearance, often from eighty to one hundred feet in height and with a trunk diameter of three or four feet. The young hemlock trees surpass all other evergreens in the grace and feathery lightness of their dense foliage which bends to the slightest breeze. Their narrow, short-petioled leaves, dark green above and pale beneath, are disposed in level sprays on the horizontal or drooping branches. The small pendulous cones, very numerous and scarcely longer than the spreading leaves, add another element of beauty to the tree in the early years of its growth.

The term "faithful" that Longfellow applies to the hemlock refers to the unchanging green of its leaves in summer and winter. But in date spring and early summer the tips of the twigs and branches are clothed with feathery masses of the new, yellow-ish-green leaves which form a beautiful contrast with the dark green leaves of the previous year, and produce an effect perhaps unequalled by any other forest tree. As the hemlock comes to maturity its foliage becomes less attractive, although it increases in sturdiness and majesty. Growing in the forest, the trunk usually tapers suddenly near the top spreading out its newer foliage over the tops of the surrounding trees. The dower part of the trunk is beset with stiff, broken or dead branches, or it is quite bare. The smooth close fitting bark of the young trees gradually passes into the rough, deeply furrowed bark of the mature trees which bear a resemblance to the red or black spruce.

The hemlock belongs to the group of plants which bear two kinds of flowens on the same plant, hence called monoecious, that is, growing in one household; the staminate flowers or those which produce pollen, are in loose catkins, growing from the axils of last year's leaves; the pistillate catkins, destined to become the cones, are at the ends of last year's branchlets. At the base of the green fleshy soales which clothe the pistillate catkins are the ovules which ripen into seeds after being fertilized by the pollen. In their early growtl the cones are of a crimson colour, gradually changing to a brown.

The seeds mature the first year, but many of the dry cones often cling to the trees for several years.

The wood of the hemlock is soft, weak, crooked in the grain, brittle and very liable to splinter. It is of a light brown or nearly white colour. A cubic foot weighs 26 lbs . It is largely sawed into boards of an inferior quality, used for cheaper building purposes, such as flooring, shingles, material for wharves, mines, etc. It is one of the most durable timbers under water. It gives a tight hold for nails, and its boards are in common use for the first covering of frame houses. Other uses are found for $i t$, as pines and other more expensive timbers are becoming rare.

Hemlock bark is used for tanning leather, and the manufacture of the extract for tanning is quite an industry in Quebec and to a less extent in New Brunswick. Indeed, the bark has for years been regarded as the only valuable part of the tree. A section of the bill recently introduced by Premier Tweedie into the New Brunswick Legislature for the preservation of forests makes it compulsory for those who have cut down hemlock trees for their bark to remove the trunks in order to lessen the danger from forest fires. That such a law is necessary shows that there is still wanton waste of what may be considered as fairly good timber. This wholesale destruction of hemlock trees for the manufacture of extract threatens to lessen seriously the further supply of hemlock, a wood that will become more and more useful as pine disappears.

Hemlock oil, distilled from the young leaves and shoots, and hemlock gun or "Canada pitch," as it is called, a resinous exudation from old trees, are both used in medicine. The wood is of little value as fuel, burning up very quickly, and with a loud crackling noise like that of poplar wood.

The ground hemlock (Taxus canadensis) is a low straggling evergreen shrub with leaves bright green on botl sides and with a red berry-like fruit enclosing a bony seed.

The juniper (Juniperus communis) is usually found as a low straggling shrub in these provinces, with rigid, prickly leaves. Its blue berry-like fruit encloses from one to three bony seeds.

Teachens will find it useful as a preparation for Arbor day to review the lessons on our native trees which began in the March, 1905, number of the Review.

Many of the parts of evergreen and deciduous trees are good subjects for free-hand drawing: Beginners may draw the leaf-clusters of the differ-
ent pines; small twigs of hemlock, cedar, spruce or fir ; cones of the different evergreens and the seeds, if any can be found; twigs of alder, birch, willow, and the arrangement of buds and catkins upon them. These and many other forms are easily drawn, and if done as true to nature as possible will familiarize pupils with the characters and differences in our trees.

## Why the Horse Chestnut is so Called.

This is only a fairy-story; but whoever looks on the branches and twigs of a horse-chestnut tree will sec there the prints of a horse's hoofs, nails and all. Examine and see for yourselves. Then try if you can tell what really caused these marks and others that you will discover on the twigs. If you can find out, then you will enjoy the fairy story which is a pretty piece of fiction.

For fairies love no tree so well
As chestnut broad in which to dwell.
Long, long ago, we are told, the fairies found their homes in the flowers on the ground, but the flowers were picked and men mowed down the grass, so that the fairies lost their bright colours and were without shelter. Then Oberon, daylight king of fairies, and Queen Mab, moonlight queen of elves, took counsel together.

Under a grove with fronded plumes,
Whose tres were white with spikes of blooms.
The decision was to live in trees and Queen Mab on her palfrey white,

Her moonbeam bridle firm in grip,
She plied the silken milkweed whip,
And rode staight up the waiting tree,
And out each brancls its blooms to see.
Waving her saffron brand she said:
"Fairies! your future home and bed!"
And pointed up the flower-lit tree,-
Thither they swarmed as swarms the bee!
In turn each bole and fronded roof
Was trod by Elf-queen palfrey's hoof,
Till fays who bore the flame-wood lamp, Swung in the peaceful airy camp.
That was a chestnut grove they foumel!
And as the sunny spring comes round,
Queen Mab, when shines the silver moon,
And elfin bugles blow in tune,
Still rides high up each chestnut tree.
That fays may know where safe they'll be;
For palfrey prints his tiny shoe
On every branch that's wet with dew;
And that's the reason now you see
Why it is called Horse-Chestnut tree.
—Th. H. Rand.-May's Fairy Tale.
(Adapted)

## A Few Early Flowers.

Nearly all our trees put out their flowers in April or early May before the leaves unfold. Why? Many of these flowers are in catkins as the willow and alder; other trees have small crimson blossoms such as the red maple and hackmatack; others like shadbush and cherry, appearing later, bear white blossoms in striking contrast with the delicate green of the opening leaves about them.

The mayflower or trailing arbutus is one of the first plants to blossom, and is an ever welcome token that spring is here. Mayflower blossoms were said to have been picked in some parts of New Brunswick in February, but more likely the buds were brought into the house and opened in some sunny window.

The hepatica or liverwort also sends out its blue and white blossoms early. Are these blossoms sepals or petals? The hepatioa is much rarer with us than the mayflower, being found on the borders of rich woodlands. It too is said to have been found in blossom in parts of New England during the first days of our mild February.

The adder's-tongue or dog-tooth violet is also an early plant to blossom. It is not a violet but a dily, and John Purroughs has suggested the pretty, name of fawn lily from its spotted leaves-more appropriate and better even than "adder's-tongue" which name was given because of its tongue-shaped leaves which are mottled after the fashion of the adder's back.

The spring-beauty, like the adder's-tongue, springs from an underground buib or tuber. The pink or rose-colored lines of its petals are said to point the early bees to its nectar hidden away at the base of each petal. The Indians are said to have prized the nut-like flavor of its tuberous stem. The following legend will show that they prized its beauty also: Mighty Peboan (the winter) scatters around with lavish hand many snowy crystal stars. When, melted by the breath of spring, he is forced to re:reat, he leaves some of these behind; they are the spring-beanties, blushing that they have been iorgotten.

The white and blue and yellow violets, those favorites of chillren because they are found everywhere and are so beautiful, bloom in the order given above, the small swectly-scented white violets first. Children love to gather them, anvl rightly, for what is more beautiful than a nosegay of violets; and picking does no harm if the roots are not disturbed,
and the leaves are left growing; for the leaves are the food-makers of the plant.

But a word to our little friends: Do not pick all the violets and other early spring flowers. Leave some on the road sides or wh the borders of some pretty woodland path to cheer the passers-by. And flowers produce seeds. If we pull all the flowers no seeds will be ripened. But the children's friendthe violet-looks out for this. Later in the season little flowers, so small that they can scatcely be seen, grow from the underground stems and bear pods with plenty of seeds in them. Look for these Juring the summer but do not pick them.

And can the children tell me why the violets, the spring beanty, the mayflowers, the fawn lily and other spring plants can better stand the loss bf flowers (but not of leaves) than other spring plants?

> To be continued in May.

## Beautiful Canada.

The President of the American Civic Association invites his followers to subscribe to certain grod resolutions in connection with the Beautiful America movement. The change of a word will adapt them for use by our Canadian readers:

1. We will have $n 0$ dirty back or front yards about our own houses, and we will, by example and help, endeavor 10 have our neighbors also clean 11 .
2. We will plant Canadian hardy trees, shruls and vines and grow clean grass wherever we can, and will help our reighbors to do likewise.
3. We will join cheetfully, as far as our resources permit, in organized effort for clean and beautiful streets and highways, and will help any movement for parks and playgrounds with which we may come in contact.
4. We will endeavor to protect trees from the unthinking atlacks of elcetric polemen, and will not permit the setting of electric poles on our own premises except in extreme cases, and then under rigid safeguarding of trees and of landscape beauty.
5. We will oppose the e-ection or the continuance of objectionable advertising signs of any kind, and will assist in their removal by kindly argument and by openly $1 e-$ fraining from purchrsing articles so advertised.
6. We will fight the mosçuito selentlessly by cleaning up or oiling wet places where it may breed, urging others to do the same.
7. Finally, we will consider outdoor beatity as worth while and as economieally justified, and will try to have the children of Canada grow up in a greater love for the natural beanties of their country

Mr. J. Vroom writes from St. Stephen: The horned lark seems unusually plentiful this season.

## Our Coasts. II.-Their Lessons. <br> Continued.

The Agents at Work.

Professor L. W. Bailey.<br>"I with my hammer pounding evermore The rocky coast, smite cinder into dust, Strewing my bed." -Emerson.

In the last chapter of this series of sketches it was shown that the coasts are a theatne of constant warfare, a scene of strife between land and sea, the former presenting a more or less bold front of crag and precipioe, battlement or wall, against which the forces of the latter rush and rage incessantly, and not in vain. It may be interesting now to consider somewhat further the marshalling of these forces, the methods of their attack, and their limitations.

Force and motion are, as is well known, correlative terms. Hence water is powerful only when in movement, and in proportion to the rapidity of its movement. Thus it will strike the hardest when moved by heavy winds; it will hold up and carry when in rapid motion what it would be wholly incompetent to move when the motion is slow. Let us compare some of these kinds of motion, and their effects.

The first cause of movement in the sea is the existence of different temperatures determining currents, such as those of the Gulf Stream or the great Arctic current from Baffin's Bay. We are but little affected by the former, owing to its remoteness from our coasts; its most important indirect influence being the imparting of abundant moisture to the atmosphere above it, and thus causing fogs as this moisture is condensed by passing over colder areas nearer the shore. So the Arctic current, thongh nearer the coast, moves but slowly and mostly in deep water, and hence has little influence as a mechanical agent; but in addition to helping to determine fogs it brings large quantities of ice into the waters of the Gulf and keeps all our coastal waters, even in midsummer, excessively cold. It also, through its low temperature, markedly affects the nature and distribution of the fishes and other forms of life which frequent our shores.
A second cause of movement, due mainly to the gravitational attraction of the moon, is to be found in the tides. These in the open ocean are of dittle significance, being merely an alternate tise and fall, of a few feet; but where for any reason the general tidal movement is interfered with, it may, in addition to greatly augmented height, acquire all the velocity and therefore all the power of a river
current. Nowhere, probably, are such currents better exemplified than in and about the Bay of Fundy. Opening broadly as the latter does, towards the advancing tidal wave of the Atlantic, the waters of the latter are not only crowded together by the diminishing width and lessening depth of the Bay until at its head, as in the estuaries of the Petitcodiac and the Avon, it may reach at times the extraordinary height of sixty feet or more, but beng driven throughi narrow straits it may acquire a rapidity of flow which is almost irresistible. The Bore upon the Petitcodiac at Moncton is well known to most provincialists, and a representation of its advancing front, sometimes four or
incessant and in the aggregate vastly exceeds in its effects bath of the other agencies combined. Reaching the land, waves also receive directly the waste of the latter, and thus armed are able to do what mere water, however powerful its movements, would be incompetent to effect. Waves are the chicf instruments or agents of wear; tides and currents are mainly of interest as the means of transportation and redistribution. Having in the last chapter sufficiently considered the first of these results, let th now turn our attention more particularly to those last mentioned.

Of what are beach-deposits composed? Let any one collect as many different varieties as he can of


THE BORE IN THE PETATCODIAC RIYERIAT MONCTON, N. B.
five feet high, is here given. The Digby Gut and the entrance into Minas Basin, like the Petite passage between Digby Neck and Long Island, though without bores, also well exhibit the force and turbulence of the inflowing and outflowing waters, while at the western end of Deer Island in New Brunswick the conflict of opposing currents in the Bay of Fundy with others from the Passamaquoddy basin determine a whirlpool or veritable maelstrom, capable, with a high run of tides, of dragging down boats even of pretty large size.

The third kind of motion is that of Wind-waves. These affect individually only a small body of water, bust being essentially surface effects and needing but little deptll, they reach quite to the shore. and as wave succeeds to wave the action is
"pebbles on the beach" and probably considerably nore than thalf of them will be found to consist of some variety of quartz-the hardest of commonly occurring minerals-either simple white quartz, or jasper or agate or chalcedony; or, if not of quartz only, of some silicions and almost equally hard mineral, such as feldspar or hornblende, or combinations of these. Why is this? Simply lecause these very hard minerals are more dunable than others ant have been left where all others Have been ground to powder. If the lreacls is a sandy ne, exammation will show that the grains of sand are also nothing more than grains of quartz, and there is little else. It is only where the shore is composed of mut that soft materials are to be found, and these are evidently the rock-floor result-
ing from the grinding process to which all have been subjected. In the case of the coarser beds the fact of grinding is indicated by the rounded or nearly spherical form which the pebbles usually exhibit, and the roar attending the movements of breakers on the beach is not that of the breakers only but of the rock fragments which they are continually moving and grinding one against another. The coarser beds, known as "sea walls" and in which the separate pieces may be several feet in diameter, are, moreaver, only to be found in exposed situations, where the waves and storms strike with the greatest power; sand beaches usually skirt the shores of open bays or indentations, somewhat better protected; muddy deposits are found in harbors, about the mouths of rivers, or in off-shore shallow soundings, where gentler movements prevail. All have been derived from a common source, but represent different stages of the grinding process, and have been thus separated and differently deposited just as the depositing agents, tides and currents have been able to lift and transport them. To be continued in May.
[A coast view in Dr. Bailey's article for February erroneously represents a cliff near Alma, N. B. It should be Tiverton, N. S.-Editor.]

## Correction of Compositions.

It is wise to have one member of a class write on the board, that all may get the benefit of the public criticism of it. As the class writes, the teacher should move from seat to seat, making suggestions, and correcting and preventing errors. If all the rules for punctuation and for capitals belonging to the grade are taught early in September, the pupil can apply them during the year, and save the teacher much of the work of correction. All misspelled words should be corrected and used for special drills. All grammatical errors should be collected in a book for that purpose, and then made the basis of a lesson in grammar before the next composition is written. It is wise to place the invitials of the pupil in this book, opposite the errors he has made, that you may bring these errors directly to his notice in the class. After the compositions have been corrected individually by the teacher, the child should rewrite them in a book for that purpose. -Sel.

I finil the Review very helpful and it seems to be getting better every month.-M. C. M.

## Millet.

By Miss A. Maclean.
Sensier, the faithful friend of Millet (mee-ya), tells us that it was difficult to get a just photograph of him. This is a copy of the one usually given of him. But Sensier (san-see- $\bar{a}$ ) says of a photograph taken of him at Barbizon: It was late afternoon; he was standing full length in sabots (sab-o), his back to a wall, his head raised straight and proud, one leg


Millet. a little forward like a man 'who balances himself exactly; his hat in his hand, his chest out, his hair thrown back, and his eyes as if fixed on some threatening object.. This picture is to me Millet's whole life. He was pleased when I said, 'you look like a leader of peasants who is about to be shot.' ""

Jean François (frang-zwä) Millet was born on the 4th of Ootober, I8I4, at Grouchy, (groo-shee) in a long, low house built of unhewn, gray stone and half hidden by the foliage of a gnarled old grapevine. The little village of Grouchy, peopled by about twenty-five families, stood on the granite cliffs of La Hague, in full view of Cherbourg Roads. But though the village stood on granite cliffs, the country back of it was fertile, and the peasants who labored there were prouder and wilder looking than those nearer Paris, at Barbizon. They were, however, simple-minded, quiet people from whose doors no one was ever turned away lungry. All the men and women who avere able to do so worked in the fields in summer.

Millet's father was like the other peasants, but he was passionately fond of music and trained the village choir. He was equally ford of nature and was always pointing out natural beauty to his children. Millet remembered that the used to carve wood and model in clay. Millet's mother was descended from a family that had once been gentry in the country. She was sweet and gentle, dearly loving lier children whom her never-ending toil
in the fields in summer and spinning and weaving in the house in winter prevented her from bringing up, for the women among the tillers of the earth have both their own curse and men's curse to bear. The grandmothers, who were too old for hard work, brought up the peasant children. Millet's grandmother was a good woman of strong character and well beloved.

Millet's education was better than that of his fellow peasants. He studied earnestly, and the parish priest took an interest in him and taught him Latin. Before he was old enough to work all the time in the fields he could read Latin authors. His grandmother had the germ of the art life in her; his father was an artist unable to express what he felt. When Francois worked in the fields with him and used to sketch at noon while the other laborers slept, he used to say to himself, "I have the longing without the power: perlhaps the bon Dien has given both to Francois." Later, when his younger sons were grown, he took Francois and two of his drawings to a painter at Cherbourg. The painter at first refused to believe that Francois had drawn them, but when he was convinced the blamed the father for keeping one so gifted toiling on the farm, ard asked that lirancois remain with him. Francois remained with him, but learned less from him than from studying and copying some old paintings in the museum at Cherbourg. He read much in the library there; Victor Hugo and Chateaubriand shaw-toe-bree-ang) especially impressed him. Later Theocritus and Burns were his great favorites.
Presently the gentle-hearted father died and Francors returned for a time to the farm. But the eitizens of Cherbourg had become interested in the young man and voted money to send him to Paris to study art. With sore hearts his mother and grandmother gave him their blessing, and the young man with the heart of a boy in his big body went to Paris. He was proud, shy, sensitive and awkward, and for a time he wandered about Paris, speaking to no one for fear of being laughed at. Finally he discovered the louvre, the great ant gallery of I'aris. For a month he spent nearly every day there. He was very homesick but the pictures held him. The works of Michael Angelo (me-kel-än-ja-low) impressed him most. "I low cl," "he said," everything that was powerfin, and I would have given all of Boucher (boo-shi.) for a single nude of Rubens." As life advanced he cared
less for Rubens, but Michael Angelo and Poussins remained his life long favorites. There is muoh in his 'works that suggests both-Poussins' sober coloring and absence of sensuous quality and Michael Angelo's ruggedness and strength of line.
Soon Millet became a pupil of Delaroche. In Delaroche's (del-ä-rosh) studio he was very quiet and made no advances to his fellow pupils. They teased and joked him, but when they went too far the young Hercules threatened to answer with his fists and they let him alone, nicknaming him "d'homme des bois." They did not understand his way of drawing and did not believe that this "man of the woods" would ever "arrive." "Eh," said they, "are you going to make men and women on your own plan? The master will not be pleased with your work." He replied, "I did not come here to please anybody. I came here because there are casts and models here to study from. Do I find fault with your drawings, made of honey and butter?"

Here I may say that the return to the study of nature, whioh had been the glory of the Renaissance, practically died with Michael Angelo, and after that falseness and artificiality crept into art, and at the time Millet went to Paris there was an artificial academic way of painting that was an abomination to Millet who had been Nature's own pupil in the fiekls at Grouchy.

Millet soon left Delaroche's studio, accompanied by a fellow pupil, and they took a little third storey room and went to work for themselves. The money given by the citizens of Cherbourg was now spent and he tried to sell his pistures, but nobody would buy. He was driven to paint signs or anything that would bring him the needed coin. If it had not been for his fellow sturlent, Marolle, who stood between this shy child of Nature and Paris, Millet would probably have succumbed to the trials which burdened him then. Iater, Diaz, (dee-as) Rousseau (roo sō) and Sensier became his friends and did all they could for him, but want was ever hovering near.

During the ten years subsecquent to his leaving 1)elaroche's studio, Millet married twice; first to a beautiful, delicate girl who was inclined, like himself, to look on the dark side of life and who succumbed to her lurdens about three years after their marriage. Ile married again a strong cheerful woman who courageonsly stiond by him till his death. The work never fails to hear of its great
men, but how often the women, to whom the world so often owes its great men, are never heard of. But when God awards the danrels, these women will take no second place.

Millet found that he dared not paint as he wished while his children needed bread; he must paint what people would buy. Necessity and his facility in painting flesh and the mude drove him for a time to the limits of propriety. Reports of an exhibition of some of his pictures reached Grouchy and this grandmother wrote, "Follow the example of the man of your profession who said, 'I paint for eternity;' for no cause whatever permit yourself to do evil works or lose sight of the presence of God." Later he said to his wife: "If you wish I shall never paint any more nude pictures. But life will be harder; you will suffer from it, but I shall be free to accomplish that which I long to do." She replied simply, "I am ready; do as you wish." He left unfinished a picture of Hagar and Ishmael and began "The Haymakers." His family increased and life drove him hard, "But I could have forgotten it all," he said, "if I conld once in a while have seen my native place."

The salon (sal-ong) at Paris systematically snubbed any artist who dared to imitate nature, and Millet's pictures were rejected. He however managed to sell "The Haymakers." Cholera had attacked Paris and hearing of Barbizon he went thither. We are told that when he arrived at Chailly the and his family set out across the fields to Barbizon in a rainstorm, he carrying his little girls on his shoulders, his wife following with an infant in her arms which she sheltered from the storm by turning up her skirt over it. A maid brought up the rear with a basket of provisions. A peasant woman who beheld the procession took them for strolling actors. They found an unoccupied, one storey, three romed peasant house, rose and vineciad, with a garden behind; this they rented, and it became their permanent home. Millet never owned a home of his own, though he longed for one. The two-floored rooms of the house he rented were occupied by the family, the third, having only a mull floor, was his studio.

Sensier tellis us that Barbizon filled Millet with enthusiasm, and for a time he was in such a state of excitement that he conld not paint. He felt his feet again on God's fresh earth; he became again a peasant.

After quieting down he proceceded to paint the scenes about him,-sawyers at work on gigannic
trees, wood gatherers, charcoal burners, quarrymen worn with toil, poachers on the scent, stone breakers, ploughmen, etc., and each scene he sketclied in a day-sometimes in a few hoursusing them later in his compositions. Here he was at home with the school of artists growing up at Barbizon, the artists swho introduced into modern landscape painting the poetry of a new ideal, and whose works are still the honor of modern dandscape painting. And Millet was one of themMillet with his pure ideals, clear brain and powerful hand. He celebrated his own daily life and work as a peasant, and was no revolutionist as some suspected. The peasant represented to him the clearest type of the human family atoning for primal sin. And if before a painting of Millet's we are shocked by its roughness and unusualness, if we try to forget our littlenesses and traditions and look backward over the languages of human toil and endeavor, we will surely come back to Millet and say, "He understood."
"The cry of the earth," he said, "is noit of my invention. "Thon shalt earn thy bread by the sweat of thy brow' was tuttered centuries ago; who may change it?"

When accused of not seeing the beautiful side of country life, he said, "I know that there are handsome men and maidens in our villages. I see and love the trees and the flowers of which Christ said. 'Solomon in all his glory was not arrayed tike one of these,' but look at the laboring horses steaming on the plain, look at the broken backed man willo is trying to straighten himself upright for a moment in order to breathe and wipe the sweat from his brow on the back of his hand. Look at that poor woman all bent, who is dragging herself painfully atong under a bundle of fagots-are these the gay and merry laborers in which people would have me believe? It is the Imman side that presents itself to me. I have never known the joyous side."

And yet he was happy in his own home. When weary or baffled in his poor little studio, he would open the door, and the tired artist would become a child among his cliildren, iveaving fantastic stories for them.

But he began to suffer from violent headachessometimes for days, sometimes for weeks-supposed to have been brongint on by working in his ill-lighted studio. When he found the headaches coming on the could sometimes ward them off by rushing away to the fieds and forest. The fresh air revived him and he would climb rocks and
amuse himself with childish joy, clad in an old real jacket, with sabots on his feet and a weatherbeaten straw hat on his thead. "I do not know anything more delightful," he said, "than to lie on the heather and look up at the sky."

To be concluded in May.
Notes-The name of Delacroix was not intended to be among the names of Barbizon artists mentioned in the February issue of the Review: In the art world of Paris, about 1830, there was a revolt against the classicism of the schools. The revolters were all alike in that they wished to study from nature, but they generally arranged themselves into the realists who strove to be absolutely failfiftul to nature, like the Barbizon school, and the romancists, of whom Delacroix was leader, who thought that it wis better to idealize more or less.
A. M.

## Picture Study Queries.

M. Mc.; Albent Co.-Best thanks for your composition. Certainly the lark does not care very much for trees, but I was not aware its claws were too straight for perching on branches. Youl may be right however. Perlaps yout can tell who wrote the lines quoted:

> "O shame to let a little bird Thus get the start and first be heard; Come, then, and let nis tune our throats And join its song with grateful notes."

Jeannie.-There is a valuable article on Bird music in Harper's Magazine, Angust, 1902, by H. W. Oldys. After giving an illustration of the duet of meadow-larks, he states, "looth began singing slightly out of tune, and in a short time, by gradual degrees, they had exchanged parts, so that No. I sang the plirase originally sumg by No. 2 while No. 2 sang that originally uttered by No. I"a remarkable incident.
S. M. R.-Remember it is not possible to estimate the full effeot of a great colorist's work, when one knows only reproductions in black: and white. The district was not so barren as you suppose. Nillet declared the country- "so beautiful, that he never thought of Jescribing it."
A. P.-Thank you for your notes. I believe the bird is indifferently called, "common kark, field lark, or sky lark. It is not foutd in Canada in the wild state. The bird in France is probably like the Britislı. They all come originally from $\backslash$ sia.
A. S. McF.-It woud take too much space th enter into the philosophy of art. Dr. J. C. V'all Dyke says "The highest art of all, then, is that which consists in the expression of one granml idea with such force that every other thing is forgutten
in its contemplation." Breton's picture would be good even if there was no lark, or if the picture received other titles. (See Psaln 104, 23.) That girl is competent and determined and cheerful. Pity would be more appropriate for a poorly-dad, ill-nourished 'hand' in a factory.

Musical.- 'Music and Youth' is now defunct, I believe. There were supplements in Sept. and Oct. 1900, giving illustrations of voices of mature. Refuest a musical friend to give you a pontion of Beethoven's Pastoral symphony. Look up references in your bible to the "joy of harvest."

Arcady--Hogg, I believe, has a poem on the skylark: The words you refer to are by Shelley. I cannot say where you can find them.
"The pale purple even
Alelts around thy flight:
Like a star of heaven
In the broad daylighte
Thou art unscen, but yet I hear thy shrill delight."
W. M. M.-Jules Breton also wrote poetry.

Sir Lewis Morris wrote a brief poem, Morning Song. If you think our picture represents Sumrise the words by Morris are more suitable than Shelley's.
"Aloft ons cireling wings
The momnting skylark sings,
A denizen of air, scorning tertestrial things."
11abel.-A picture must deal with one moment only. There is 110 progression as in poetry.
T. L.-She behaves as an imocent healthy girl should who loves work, and is in hrarmony with nature. Not the sight of the lark, but its song controlled her.
H. B.

Waweig, N. 13 .

## How One Teacher Used the Prcture "Saved."

The primary school tatugth by Miss Mand A. Willams, Harvey, lork Comnty, N. l., was successful in winning the prize offered by Rev. Hunter lhoyd for the best set of quessions on the pieture "Saved" that appeared in the lebruary Review. In the lope that such questions may be surgestive to wher teachers a few of them are given here:

1. Each one name something you see in the picture.
2. What do you like best of all in the picture? (Fn nearly all cases the (loge).
3. What hats the dery done?
4. How does the dog feed? (Tired but comented).
5. What do you suppose lee is thinking of?
6. Do yon think that the chitd and the dog were strangers or friends? Way?
7. What is on the dogs paws?

8, How did the child get there?
9. (For imagination) What name shall we give the child?
10. And how old may she be?
11. How old may the dog be?
12. And what name shall we give him?
13. Why is the dog's mouth open?
14. Where are the child and the dog?
15. How many birds are theie?
16. What kind of birds are they?
17. Is the water a river, a lake or the sea? Why?

18 Who painted the picture?
19. Mention another picture of his?
20. Tell something about him?

The teacher adds: "I used the picture in composition work, allowing the children to witite its story. Two little girls thought the dog had saved the child from a burning building, the others thought it had been saved from the water. I also allowed the children to write some questions about the picture, and these brought up other points. I have used it as a means of tnaining their memory, by turning its face to the wall and getting them to write all in the picture they could remember. I used the picture to im prove their language, both oral and written, their imagination and memory.
"It pleases ne to have the children take so much interest in their pictures. All children love pictures and it is just as easy-and so much better-to have them acquainted with good ones rather than poor ones.'

## Art Notes.--No. V. <br> Rev. Hunter Boyd.

This month the choice of subject does not call for munute analysis such as we have followed with other piotures, but it affords very great pleasure to exanmine reproductions of the work of a Canadian artist.

One of the busiest men in the Dominion is Sir William Van Horne, who, in addition to the laborious results he has achieved in railroad construction in Canada and Cuba, is also director of a score of great concerns, and yot has found time to collect some of the choicest art treasurers to be found on this continent. Not only so, Sir Willian is an artist himself. Sir Martin Conway says of his collection; "In all of these there is merit; the collector hras a definite taste of his own, and buys to satisfy it. But more than that he paints pictures himself, and pictures of no indifferent merit. He paints with an enthusiasm as great and an energy as persistent as those which carried the iron rails across the continental breadth of Canada. IIis trees are not inventions, Dut old friends. He knows a whole army of them botween Montreal and Vancower, and can draw the likeness of any one you ask for. It is in
their Autumn livery that he loves them best, or rising naked out of the snowy mantle of Winter. These pictures of his are no niggled amateur productions done on a tiny scale but large canvases boldly handled. 'The composition is sometimes sketched apparently in ink, rapidly laid in with a large brush on the canvas itself. Few people understand the individual character and life-habit of trees better than Sir William; yet there is nothing of the scientific diagram about his pictures of them, whilst in their grouping, their lighting, and their colour, there is much art."

The two points specially insisted upon by Sir Martin Conway are admirably illustrated in the copies kindly furnished for the Review-the Autumn livery, and the snowy mantle of Winter.

It is one function of a poet or artist to enable us to discern beauty where we have failed to recognize it, and we are specially prone to overlook the beauty of beeches and birches in the period between October and April. We are glad to see the new leaves, and rejoice in the mature foliage with its possibilities of light and shade, but the dedicate tracery of tree anatomy is for most a late acquisition, the pleasure of a quiet eye.

On the treatment of forest trees, and foliage by artists it may be well to consult Ruskin; Modern Painters, part II. of truth; section VI., chapter I., of truth of vegetation. Encourage the scholars to observe beeches and birches at this season, and sketh or draw from memory specimens near the school-house or any trees for which they have special fondness. Endeavor to procure a series of poetic allusions, or particulars of characters, historical or otherwise, who had these trees for their favorites.

The botanical characteristics are not called for by this study, but endeavor to evoke discussion on the symbolism of the trees; also enquire concerning the music of these trees, and compare the pine and elm. What do they say to us?

When I bought my farm I did not know what a bargain I had in the bluebirds, bobolinks, and thrushes, which were not charged in the bill. As little did I guess what sublime mornings and sunsets I was buying, what reaches of landscape, and what fields and lanes for a tramp. Neither did I fully consider what an indescribable Juxury is our Indian river, which runs parallel with the village street, and to which every house on that long street has a back door which leads Jown through the garden to the river bank.-Emerson.

## April Birthdays.

William Shakespeare, the world's great literary and dramatic poet, was born at Stratford-on-Avon, Warwickshire, England, April 1564-on the 23rd of that month, it is supposed. His father, John Shakespeare, was of the yeoman class; his mother, Mary Arden, was of a family of the minor gentry. Little of certainty is known of Shakespeare's early life. He was doubtless educated at the Stratford grammar school. He soon left his native place to seek his fortune in London where most of his plays and sonnets were written. The following extracts may serve to show what other literary men thought of him:
If I say that Shakespeare is the greatest of intellects. I have said all concerning him. But there is more in Shakespeare's intellect than we have yet seen. It is what I call an unconscious intellect; there is more virtue in it uran he himself is aware of.
-Cartytc.-Essays.
He was not of an age, but for all time!
-Ben Jonson.

When Shakespeare is charged with debts to his authors, Landor teplies, "Yet he was more original than his originals. He breathed upon dead bodies and brought then into life."
-Emerson.
Now you who rhyme, and I who rhyme,
Have not we sworn it, many a time,
That we no more our verse would scrawl,
For Shakespeare he had said it all!

> -R. W. Gitder.

But Shakespeare's magic couid not copied be;
Within that circle none durst walk but he.
-Dryden.-The Tempest.

April 23, 1799.-Sir William Edmond Logan, born at Montreal, graduated at the University of Edinburgh in 1817; was director of the geological survey of Canada 1842-69; published valuable reports and scientific papers and accomplished resiths of signal importance in the geology of Canada.

April 25, 1599 .-Oliver Cromwell, born in Huntingdon, England. Had a limited education; in the Short Parliament of 1628 he made bat oine speech (a pattern for modern legislators), and during the eleven years' prorogation devoted his time to the cultivation of his farms. He was the chicf leader of the Parliamentarians against the King; became Lord-protector of England, 1653 .

April 30, 1834-Sir John Lubbock, born in London; educated at Eton, became interested in etlonology and natural science to which he devoted the remainder of his life. His researches on British wild flowers in relation to inseots, and on ants, bees and wasps, are among the most popular of his works.

## The Course of Study-A Criticism.

## Editor Educational Review:

Dear Sir:-I want to express the pleasure with which I read the suggestive discussion and intelligent criticism of our school work by S. D. Scott in the March number of the Review. In common, I believe, with the great majority of teachers I endorse all that Mr. Scott says, and my only regret is that circumstances make it impossible, in some instances, to carry out his very reasonable suggestions. For example he says, "It would seem possible to arrange a system which would grade a child in some subjects and to leave him to take the others over again with his old class. The grading might be to some extent by subjeots, and not by a level standard covering the whole range. That is exactly What would happen in an ungraded country school where a pupil is carried along in each subject as fast as he can get ahead in it." Mr. Scott is quite right with regard to the ungraded sclool, for in this particular such a school is aided by its very limitations. As there is only one teabiner a pupil may study while the teacher is engaged with that pupil's class-but in sabject which the pupil does not desire-and join another class of a higher or lower grade when the same subject is being dealt with in that higher or lower grade. But in a large, wellgraderl, well-manned school this is different. While weither teacher nor school authorities object to a pupil from one grade taking a class or classes with any other grade the pupil finds it impossible to do so without losing some other class which the wishes to take. For example, suppose a lad registered in grade eleacn is backward in Latin and geometry. He may wish to take Latin with grade ten and geometry with grade nine, and no one objects to his doing so. But as different teachers take the different subjects, at the time when his own grade cleven class comes to the classical master he cannot leave it and slip, into the grade ten Latin class for at that moment no such Latin class, is in progress and the graile ten class is in the mathematical or sume other rom. Neither can de slip into the grade nine geometry class for the grade nine class is probably at science, geography or drawing. But when the Latin master is doing the work of grade ton or the teacher of mathematics the geometry of grade nine can the lad not leave his own class then and join one of these? He undimutedly may, but in doing so the will lose the English, the history, physics, or some other subject which waill go on in
grade eleven at the very hour and which he does not wish to lose.

If all or a large number of pupils required to take the same subjects in a higher or dower grade than their own then the teaching staff could do much to arrange the time-table to accommodate them. But as the special cases are exceedingly varied it is impossible, without greatly lengthening school houns or multiplying the number of teachers, to do much to solve the problem. Thus it will be scen that the difficulty is not with the course of study nor with the teaching staff but rather with the conditions under which the best work is being done.

> W. T. Kennedy.

County Academy, Halifax, March 16th, 'o6

## Criticism of P. E Island Schools,

Mr.. Theodore Ross, director of the Macdonald Rural Schools in Prince Edward Island, writes as follows: "Perhaps the severest arraigmment of our educational system that it has yet met with from the public platform, was that made by the Hon. S. E. Reid, Commissioner of Agniculture, in an address delivered before the Annual Convention of Farmers' Iustitutes. This is only the beginning of an educational campaign undertaken by the farmers of this province on behalf of a system of education that shall articulate more closely with our industrial needs." The following is a portion of Hon. Mr. Re:d's address :

Our people provide generously for a training in languages that induces the boys to enter the professions leaving parents in thein old age to look after the old farm. We give more attention to Latin in our only high school than we do to agriculture, botany and physical geography combined. We spend yearly on this school that devotss more than onc-third of its energies to the teaching of languages alone, a large sum. We spend annually half of our revenue on our public schools which are so conducted that the tendency is away from the farm, rather than towards it..
You stupport a system of public schools at a cost of $\$ 166,000$. There your children shall toil or be supposed to toil, but there they shall learn little or nothing of that you will most want them to know, directly they leave school and enter upon the practical business of life. They will in all probability be dairymen but they will not know the difference letween a dairy cow and a beef cow, or whether milk is soured by witches or by bacteria. They will have the feeding of cattle lut will not know what is a proteid or what is a catbohydrate or whether a cow should be fed all she will eat or just what will keep her alive. They will have the sowing of seeds but will have no means of knowing whether they are sowing timothy seed or sowthistles, they will have the reaping of harvests lutt no means of Sinding out why they get twenty lushels instead of forty. Some of them will represent you in parlanent and have a share
in making laws that may prove a blessing or a curse. But they do not hear one word about the political organization of our country, or the meaming of free trade or protection, or know there is such a thing as economic laws....

Can a system that neglects all these things be the best suited to a country that depends entirely on agriculture?

## A Suggestion

A subscriber, once a teacher, now pursuing a different line of 'work writes: "The idea of sending prints of celebrated paintings is one of the grandest I think you thave ever adopted. Were I teaching again I could make a dozen different uses of them. Would it not be a good idea to propose some subject and ask, particularly the teachers of miscellaneous schools, to give an outline of their method of teaching it to their particular schools and the manner in which it was accepted? Then if you could publish two or three of these in a clear concise form don't you think it woukd benefit those teachers who find little time-and money too-to attend the Normal Schools? In my experience with country sohools when first teaching I would have welcomed such an idea. Wishing you still greater success with your paper and your work,"
E. S. C.
[The series of questions on another page on the picture "Saved" anticipates our subscriber's suggestion to some extent, but there are greater possibilitiess in it to which attention may be given as the work goes on.--Editor.]

## A Persevering Student

There's a merry little student, in a stit of brown and gray, Who says his single lesson o'er a thousand times a day;
He studies well the alphabet from cally dawn till night; He knows one letter only, but he always says it right. He cannot take his lunch to school as childnen often do, But when he's feeling lungry, he will eat a bug on two; And then without a single word about $\mathrm{A}, \mathrm{B}$, or C ,Recites the same old lesson, "Chick-a-d-d-d-d D." -Hannah G. Fernald, in Ginn's New Second Music Reader.

## A Picture of a Tree

The other never once has ceased to gaze
On the great elm-iree in the open, posed Placidly full in front, smooth bole, broad branch, And leafage, one green plenitude of May. The gathered thought runs into speech at last.
"O you exceeding beauty, bosomful
Of liglts and shades, mu:murs and silences, Sun-warmth, dew-coolness,-squirrel, bee and bird, High, higher, highest, tili the blue proclaims 'Leaz'e carth, there's nothing better thil next step Heazenteard!' - So. off tlies what has wings to belp!"

Fiom The Inn Albla--Robert Broaning.

## THE EDUCATIONAL REVIEW.

## Nature-Study Calendars.

A letter from Principal D. W. Hamilton of the Macdonald Consolidated School, Kingston, N. B., gives an interesting account of the Nature-Study work attempted by the pupils in addition to that done in the garden. He writes: "Nearly all our pupils keep bird and flower calendars, and quite a number have weather records. The weather record I am sending is a copy of one kept by Wilbur Crawford, a grade 8 boy. He has it complete since January 1, 1905. In each school room there is a bird calendar and a flower calendar. The bird calendar I am sending is a copy from the advanced department calendar. The flower calendar is from Miss Darling's room, grades 3, 4 and 5. It was made by Lulu Crawford, a grade 3 pupil."

Extracts are given below from these calendars in the hope that they may suggest to other teachers the usefulness of this work and the effect it may have on boys and girls in teaching them to observe and ingiving them a greater interest in their surroundings. There is only space for a few lines of each calendar, but this is sufflcient to show how the work is done.

WEATHER IREPORT.

| Day | Date | Time | Tem. Fahr. | W"inds | Snow | Hain | Fog or Mist | Clouds | $\begin{aligned} & \text { Hrs. of } \\ & \text { sun } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Bun } \\ & \text { Rises } \end{aligned}$ | Sun Sets | Moon | Remarks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 190\%. | 9.30 |  |  |  |  |  |  |  |  |  |  |  |  |
| Sat. | $\underset{l}{\text { April }}$ | A. M. | $36+$ <br> Wism | South Mert. | None | None | None | Heavy | 0 | 5.59 | 6.43 |  |  | d |
| Sun. | 2 | " | $\begin{aligned} & 25+ \\ & \text { Cool } \end{aligned}$ | N. W. Ned. | " | " | ، | ، | $\frac{1}{2}$ | 5.56 | 6.44 |  |  |  |
| Mon. | 3 | " | $30+$ Cool | N. W. Aled. | '6 | ، | * | Med. | 5 | 5.54 | 6.46 |  |  |  |
| Tues. | 4 | ' | 40) + <br> Warm | South very | '، | * | ، | " | 14 | 5.52 | 647 | New Monu |  |  |
| Wed. | 5 | * | $37+$ <br> Warm | S. E. <br> light | " | Light | * | II eavy | 0 | 5.50 | 6.48 |  |  |  |
| Thurs. | 6 | " | $45+$ | S. F. | - | * | Light | * | 0 | 5.48 | 6.49 |  |  |  |
| Fri. | 7 | " | Warm $35+$ Warm | Stroug South very light | " | None | Nist | Med. | 86 | 5.47 | 6.51 |  |  |  |

BIRD CALENDAR.

| Date | Hird | Plumage | Ifabits, Ete. | leported by |
| :---: | :---: | :---: | :---: | :---: |
| 1905 |  |  |  |  |
| Mar. 3 | Old Tom Pozbody | White pateh on throal, striped heurl, lark back Slate colour, light breast, two outer | ays "Old Tom Peubody" | Lulu Kelly |
| * 10 | Junco |  |  |  |
|  |  |  | Tame | Louis Gurd |
| - 23 | Tree Sparrow | Brown head, dark spot on white | Sweet, musieal songr | Millie Northrup Louis Gard |
| " 27 | Blue Heron | Bluish celor . | long legs and neek. In water. |  |
| " 30 | Northern Shrike | Blue and brown . . . . . . . . . . . .Leddish colorBrown head and light bieast. .... | Latgo with strong curved bill... . | Allan Flewellingr |
| Apr. ${ }_{6}$ | Fox Sparrow .... |  | Quite large, atayy only a short time | Allan Flewelling Walker Beljea |
| " $\quad 2$ | Chipping Sparrow |  | Brown head and light breast..... Small, bas : Brownish und shows white tail feathery when flying. ......... Goorl singer |  |
|  | Vesper Sparrow |  |  |  |  | Elhel Thomson |

WILD FLOWER CALENIAAR.

| Commen Name | Date | Family | Hescription | Pupil |
| :---: | :---: | :---: | :---: | :---: |
| Spriag Beauty ............ | 8 April. | 'urslaso | Flowers mink or white. | Willistor Carmichael |
| Adder's Tongue or Jog's Tooth Violet | $29$ | Lily | Vellow flowers, lily shaped | Hazel Wetmore |
| Trillium (purple) | 29 " | Lily . | Flower [urple, 3 leaves, whorled | W'illiston Carmichnel |
| Maple (red) . . . . | I Alay | Sonpberry. | Red flowers in cluster. | (irnce Shamper |
| Dutchman's Breeches | 210 | Fumitory . | White, twospurs on flower | Jessie Hunt |
| Violets (blue) | $3 \times$ | Virlet. . | Flowers blue, ane spur ... | Jessie Munt |
| Dandelinn ... ........... . . | 8 " | Composite | Flowers yellow, in heads | Jessie llunt |
| Bluets ......... ....... . . | 4 " | Marliler. . | Flowers hlue and white, small | Ethel Cochrane |
| Anemone (wood) | 0 " | Crowfort | Flowers white ............... | Jessic Whddell |
| Goldthread | 12 " | Crowfoot |  | Eilsie Sterritt |

The Adventures of Ulysses<br>(Continued)<br>Charles Lamb (1775-1834.)<br>Notes by G. K. Butler, M. A.

He was educated at Christ's Hospital where he remained until 1789. Among his school-fellows was S. T. Coleridge. In 1792 he entered the East India Company's service where he remained for 33 years and often used to say that the books he kept there were his real works. His sister, Mary, became insane and he was obliged to care for her for the rest of her life, though she often recovered her reason. In I807 she joined him in the "Tales from Shakespeare," and in 1808 he published "Ulysses." His "Essays of Elia" was published in book form in 1823. In 1825 he was given a pension of $\epsilon_{450}$ a year by the East India Company.

His style is said to be much affected by his constant study of the Elizabethan writers. His one weakness was an indulgence in tobacco and liquor to a considerable extent.

Page 113. 1. 4: "Raise your mast," in ancient, i. e., in very ancient, times the part played by sails in the navigating of a slhip was very small. The mast, on arriving in port, was unstepped and laid on a rest at the stern. Even in the time of the Romans the war ships depended on rowers. (See "Ben Hur.") 1. 8: We have here the names of four of the rivers of Hades. Styx was the river which surrounded the lower world. Even down to the present time deaih is often spoken of as the crossing of a river, though Christianized people speak of it as the Jordan. 4. 38: Neptune was the Latin name of what Greek deity? (See notes for Match.)
P. 114. 1. 17: What figure of speech in the expression "Ulysses' soul melted"? What is the meaning? 1. 20: Those who have read the sixth book of Virgil's Aeneid will remember a similar situation in it. 1. 29: On the subject of CEdipus, Sophocles, the great Greek tragedian, wrote three plays. One, the ©dipus Tyrannus," was the greatest ever written, if we may believe Aristotle. And so it was probably till Shakespeare's time. 1. 34: Castor and Pollux figure in Macaulay's "Lay of Lake Regillus." Helen it was who caused the Trojan IVar as she was stolen, perhaps willingly, by Paris, son of Priam, King of Troy.
P. 115. 1. 6: "Orion" as the story goes, was taken up and placed among the stars. At any rate our most brilliant constellation bears his name. 1. 13: For more information concerning Ariadne read Kingsley's "Heroes," especially Theseus. 1. I6: Parse "that late." What word do we use in place of late? 1. 21: Meaning of the word "im-
mediately?" On Agamemnon, his death and its consequences, we hrave the great Greek trilogy written by Æschylus.
P. 117.1. 14: "The wooden horse" is among the most famous things of ancient times. Its story at greater length may be found in the second book of the Eneid. 1. 24: What is the meaning of the word "machine" as found here? Look up the derivation of the word. Also if possible the meaning of the phrase "deus ex machina," which is so often found in literature. 1. 3 I: Meaning of the word "shade" as here found? What other words have we with same meaning? Some of them are English, some Latin, some Greek in their derivation. 1. 39 : Give a synonym of "emulation."
P. I18. Is. 20, 21 : Here is a chance to show the difference between Christian theology and the theology of the Greeks as to a future life; for they too, believed in the immortality of the soul. Compare the Valhalla of the Saxons.
P. 120. 1. 10: Parse "needs." 1. 12: Usual word for "invitements?" 1. 3I: A full account of the "Argo" and its voyage will be found in Kingsley's "Argonauts." 1. 38: The Octopus when its horrors have been enlarged by story and fable may have been the foundation of the tales concerning Scylla.Compare the many stories we read and hear in modern times about the sea serpent.
P. 121. There is also a famous whirlpool on the coast of Norway. In both cases cansed by the ebb and flow of the tide. 1.27: What would you call "fore wind?" d. 29: How far, in miles thad they sailed?
P. 122: In the sentence "the more be adjured them, etc.," parse the word "the." (It is an adverb of degree.)
P. 123. 1. 2.4: Meaning of "like neen." Give an adverb with the same meaning. 1. 30: What does "idle death" mean? 1. 36: What is modern name of "foredeck"?
P. 125. 1. 14 : Parse "this." 1. 18: Parse "night." 1. 23: What figure of speech in "attempt the blood?" 1. 25 : Very often in Greek poetry do weo mect with the sun addressed as the all-seeing God. 1. 27 : The ancients were much more afraid of head winds than the navigators of more modern times. If any one has a copy of Kinglake's "Eothen," he will find a fine satire on the slowness of navigation in the Mediterranean. 1. 34: Meaning of the word "stay" as found liere?
P. 126. 1. 38: Find meaning of "prodigy."
P. 127. 1. 3: Look up meaning and derivation of
the word "omen;" another word with much the same meaning is "pontent." 1. 15: Parse "days." 1. 16: What sort of a phrase is, "the wind changing?" 1.20: What is the meaning of "devoted" in this line? Look up its derivation. 1. 24: "Bark" is here used as we use "vessel." 1. 25 : Meaning of the word "wanting?" 1.29: I have the misprint "sea-news." What is correct and what are they?
P. 128.1.29: What part of speech is "scarce?"
P. 129. 1. 20: In the story of Perseus it will be remembered that Mercury lent him the winged sandals. 1. 23: The "Lessons on English" tell us that "stay" has a certain meaning and "stop" another. Does this use of the word justify that? Consult a good dictionary. 1. 36: Homer's adjective applied to "morning" is "rosy-fingered." Diana was known to the Greeks as Artemis.
P. гзo. 1. 8: Parse "killing." 1. 17: What figure of speech is "drowned in discontent?"
P. 131. 1. 57: This book spells "Augur;" is it right or wrong'? What is an "augur?" 1. 8: Is there a reasonable time allowed for the building of the bark? 1. 21: "Goodly"; find this word used elsewhere in the reader. 1. 28: I think it was Gladstone who said of the "Bear," "hight to boot the Wain." Why does the "Dipper," as we call it never set?
P. 132. 1. 6: Parse "son." What case is it? Why does it not have the apostrophe? 1. 7: What figure? 1.8 et. seq: A storm something similar to this befell Neneas and is described in the first book of the Eneid.
-There are twelve good rules which every girl and boy should inaster before they reach the age of fifteen :

Be courteous to everyone, whatever his or her station in life.

Shut the door and shut it softly.
Keep your own room in good order.
Have an hour for rising and rise.
Never let a button stay off twenty-four hours.
Always know where your things are.
Never let a day pass without doing sometling to make somebody comfortable

Never come to breakfast without a collar.
Never go about avith your shoes unbuttoned.
Speak clearly enough for everyone to unterstand.

Never fidget or hum so as to disturb others.
Never fuss or fret.-Sel.

## Problems in Arithmetic-Grade VIII.

G. K. Butler, M. A.

1. Oil which sells at the rate of 5 liters for 25 cents makes a gain of 25 per cent; find cost price per gallon.
2. A druggist buys 60 kilogranns of drugs @ \$1.20 per kilogram and sells @ Ioc. an oz. apothecary; find gairs.
3. An aricle which cost $\$ 80$ was marked 30 per cent above cost and was sold at its marked price for how much?
4. The selling price was $\$ 60$, the gain was 20 per cent: find the cost price.
5. A house which cost $\$ 3,000$ was insured so as to cover the value of the house and the cost of insurance if burned. At how much was it insured, the premium being two per cent.
6. A commission merchant receives 600 barnels of apples which he sells @ $\$ 4.25$ per barrel on three per cent commission. He invests proceeds at two 'and a half per cent. How much comminssion does be receive in all?
7. A note of $\$ 600$ dated May 3rd at 90 days and bearing four per cent interest was discounted May $23 r \mathrm{~d}$ at scven per cent; find proceeds.
8. A romm is 20 feet long, 15 feet wide and 12 feet high; find cost of plastering walls and ceilings at 25 cents a square yard.
9. Find cost of paper for the same room at 25 cents a roll when the paper is 18 inches wide and the roll contains 7 yards (walls only to be papered.)
10. Find in ac., sq. rds., sq. yds., sq. ft., sq. in., the area of a trapezoid whose parallel sides are respeotively 300 yands and 200 yards and whose altitude is 400 feet.

JI. How many gallons in a cylinder whose basal diameter is 10 decimeters and whose height is 20 decimeters.
12. The amount of a sum of moncy for four and a half years at five per cent simple interest is $\$ 306.25$; find the sum.

Answers.-(1) 18 cents ; (2) \$120.90: (3) \$104: (4) $\$ 50:(5) \$ 3061.22 ;(6) \$ 76.50+60.34=\$ 136.84$ (7) Amt. $=\$ 6061.12$; proceeds $\$ 507.63$; (8) $\$ 312-3$ : (9) \$6 2-3: (10) 6 ac. 141 rds. 28 yds. 108 inches; (If) 345.733: (I2) $\$ 250$;

The Review is a great help to me in my work in this country school, and is full of encouragement. I think that is what many of our teachers need. -Subscriber.

## The Forests of Canada

In the elementary course of the Natural History Society of New Brunswick last evening, Georgc U. Hay gave an extremely interesting and instructive talk on Forest Conditions of Canada from the Atlantic to the Pacific. The lecturer having made the complete trip, and in his usual careful manner investigated the various forms of plant dife, spoke entirely from, his own experiences.
In the course of his remarks Dr. Hay referred to the mixed growths of evergreens and deciduous trees that clothe the ridges and plains in the eastern section of Canada, and stated that from the western end of Lake Superior through the almost treeless prairies to the shores of the Pacific a great change was noticed in the flora, none of our fine species of maple being observed. This led him to say that our maple was not really a suitable emblem for all Canada.

In the prairie districts, along the streams and rivers, were observed poplar, or cattonwood, willows and box-elder, or Manitoba maple, and a few birches. It was stated that on account of their presence in all parts of the country, the canoe birch, Jack pine or white spruce would be more suitable as an emblem of all Canada.
Reference was made to the importing and planting of Siberian and other exotic species of trees in the "treeless west," among them being the flowering pear and Siberian pea.

A highly interesting description of the flora of the Rockies, Selkirks, Gold Range, Cascade and Coast Range mountains was given. The giant Donglas fir, white spruce and red cedar (the first sometimes attaining a height of three hundred feet) of British Columbia, were described, and the statement made that one acre of British Columbia forest had produced as ligigh as 500,000 feot of lumber. The timber cut "from one enormous Douglas fir or red cedar would yield about as much as an acre of our nimber lands.

Dr. Hay described the fine natural park at Van-couver-Stanley Park-where these giant trees may be seen for ages to come, long after their fellows have been destroyed,--for fire and the lumbermen are fast depleting the forests of the west, as they have tone the east. The experimental farms at Ottawa, Brandon and Agassiz were referred to, and much valuable information given regarding their practical utility in the agricultural development of Canada.-Nezespaper Report, March 21.

## The Coming of Spring

An cxercise for a number of children. The Hours are the Goddesses of the Seasons. - Selected and Adapted.

## Hours.

Come, gentle spring; ethereal mildness, come!
-Thomson.-Seasons.
First Voice-
Hark! the hours are softly calling Bidding Spring arise,
To listen to the rain-drops falling From the cloudy skies.
To listen to Earth's weary voices, Louder every day,
Bidding her no longer linger On her charm'd way;
But hasten to her task of beauty Scarcely yet begun.
-Adelaide A. Procter.-Spring
Sccond Voice-
I wonder if the sap is stirring yet,
If wintry birds are dreaming of a mate, If frozen snowdrops feel as yet the sun, And crocus fires are kindling one by one. -Christina Rosetli--The first Spring Day.
Third Voicc.-
O tender time that love thinks long to see, Sweet foot of Spring that with her foot-fall sows Late snow-like flowery leavings of the snows, Be not too long irresolute to be;
O mother-month, where have they hidden thee? -Sainburne.-A vision of Spring in Winter.

Fourth Voice.-
The Spring's already at the gate
With looks my care beguiling;
The comitry round appeareth straight
A flower-garden smiling.
-Heine.-Book of Songs.
Fifth Voice.-
Softly came the fair young queen O'er mountain, dale, and dell;
And where her golden light was seen An emerald shadow fell.
The good-wife oped the window wide. The good-man spanned the plough;
'Tis time to run, 'tis time to ride, For Spring is with us now.
-Leland.-Spring.
Enter Spring with train of flowers.

## Spring. -

I come. I comre! ye have called me long,
I come oer the momitain with light and song;
Ye may trace my step o'er the wakening earth,
By the winds which tell of the violets birth.
By the primrose stars in the shadowy grass,
By the green leaves opening as I pass.

> - Mrs. /Icmans.-Verce of Spring.

## All.-

Welcome Spring!-in sunshine clad
Well dost thou thy power display! For Winster maketh the light heart sad, And thou,-thou makest the sad heart gay. -Longfellow.-Translation from the French.

## Snow-Drop.-

I am a little snow-drop
"The morning star of flowers."
-Montgomery-The Snow-drop.

## Spring. -

Nor will I then thy modest grace forget, Chaste Snow-Drop, venturous harbinger of Spring.
-Wordsworth.-To a Snow-Drop.

## Violets.-

We are violets blue,
For our sweetness found
Careless in the mossy shades,
Looking on the ground.
Love's dropp'd eyelids and a kiss,-
Such our breath and blueness is.
-Leigh Hunt.-Violets.

## Spring.-

Welcome, maids of honor, You doe bring
In the spring
And wait upon her.
-Herrick.-Yo Violets.

## Dandelions.-

Upon a showery night and still,
Without a sound of warning,
A trooper band surprised the lill.
And held it in the morning.
You were not waked by bugle notes,
No cheer your dreams invaded,
And yet at dawn, our yellow coats
On the green slopes paraded.
-Helen Gray Cone.-The Dandelions.

## Spring.-

Dear common flowers, that growest beside the way, Fringing the dusty road with harmkess gold
First pledge of blithesome May
Which children pluck, and, full of pide, uphold.
-loavell. - Yo the Dandelion.

## Primrose-

Ring-ting! I am a little primrose,
A pale-yellow primrose blooming in the spring!
The stooping houghs above me,
The wandering bee to love me,
The fern and moss to creep across,
And the elm-tree for my ring!

> -IVm. Allingham.

## Spring-

Welcome, pale primirose! starting up betwecn
Dead matted leaves of ash and oak that strew
The every lasn, the wood, and spinney through.
'Míd creeping moss and ivy's darker green;
How much thy presence beatifies the ground!

How sweet thy modest unaffected pride
Glows on the sumny bank and wood's warm side.
-John Clare.-The Primrose.

## Hours.-

It is the season now to go
About the country high and low, Among the lilacs hand in hand, And two by two in fairy land.
-Robt. Lowis Stczenson.-Underwcods.

## Hiawatha's Canoe

For fize boys; Hiozatha dressed in Indian costume, the others carrying branches of the trees they represent, and which they cause to move os indicated.

## Hiawalla.-

"Give me of your bark, O Birch-Tree!
Of your yellow bark, O Birch-Tree
Growing by the rushing river,
Tall and stately in the valley!
I a light-canoe will build me,
Build a swift Chembun for sailing,
That shall float upon the river,
Like a yellow leaf in Autumn,
Like a yellow water-lily!
Lay aside your cloak, () Birch-Tree!
Lay aside your white-skin wrapper,
For the summer time is coming,
And the sun is warm in heaven,
And yout need no white-skin wrapper!"
(And the tree with all its branches
Rustled in the breeze of morning,
Saying with a sigh of patience,
Birch-Tree-
"Take my cluak, O Hiawatha."
Hiaũatha.-
"Give me of your boughs, O Cedar!
Of your strong and pliant-bianches,
My canoe 10 make more steady,
Make more strong and firm beneath me!"
(Through the summit of the Cedar
Went a sound, a cry of horror,
Went a murmur of resistance;
But it whispered, bending downward).
Cedar Tree.-
"Take my bonghs, O lliawatha!"
Hiarealha.
"Give me of your roots, o Tamarack!
Of your fibrous roots, O Larch-Tree!
My cance to bind together.
So to bind the ends together
That the water may not enter,
That the river may not wet me!"
(Ancl the Larch, with all its fibres,
Shivered in the air of morning.
'Tonched his foreliead with its tassels,
Saicl with one longe sigh of sorrow)
Tomarack.-
"'Fake them all, O Lliawatha! !"

## Hiareatha.

"Give me of your balm, O Fir-Tree!
Of your balsam and your resin,
So to close the seams together
That the water may not enter,
That the river may not wet me!"
(And the Fir-Tree, tall and sombie,
Sobbed through all its robes of darkness,
Rattled like a shore with pebbles
Answered wailing, answered weeping,)
Fir-Tree.-
"Take my balm, O Hiawatha!"
-Adapted from Longfelluw.

## The Call of Spring

Far down below, in the dark, damp ground, A little seed slept sound, so sound;
Far up above, in the open sky,
Grey clouds floated gracefully by.
Down from the grey clouds up in the blue,
A raindrop fell, and trickled through
The hard brown earth, until it found The little seed, that slept so sound.

Then over its face the raindrops sped,
And the seed awoke, and stirled in its bed,
"Come little seed, 'tis time to sprout,
For summer is coming, without any doubt."
"And spring has sent me," the raindrop said,
"To call you forth from your little bed;,"
Then the tiny sprout began to grow,
And a song in its heart to overflow.
To the beautiful world that was waiting above, Filled with sunshine, beauty and love;
Hour, by hour, by night and day,
The little plant fought its upward way.
Eagerly stretching towards the light,
Forgot the rough way and darksome night;
At last it peeped the brown earth through, Oh! the wonder that in it grew.

The sweet, soft air, and the song of the bitd, The voices of merry children heard,
With joy the little plant did bring,
His tribute of love to the beautiful spring.
-Selected.

Four quilts are ready to fold and spread
On Mother Earth's old trundle bed.
The first, a brown and white old thing.
She spreads on in the eatly spring.
The summer one is green and bright
With daisies nodeling in the ligltt.
And then when winds begin to blow,
She spreads a red quile on, you know,
And sews it througl with yellow thread.
And by and by, all in a night.
She epreads her quilt of snowy white--Sel.

## Guess the Names of the Islands

Guess the name of the islands where yellow birds sing, The islands where ponies abound,
The islands where people are graciouse and kind, The islands where robbers are found.
The island of fur that is highly esteemed, The island not known long ago,
The island from which we get heat, light and smoke. The island of frost and of snow.

The island that's famed for its lake of hot pitch, The island that likes to lap cream,
The island that's noted for exports of rum, The island that dams a small stream.
The island where Bonaparie drew his last breath, The island of soft, swampy ground,
The island that comes freshly coined from the mint, The island that's south of its sound.

## Guess the Names of the Fish

Guess the name of the fish with two heads but no tail, The fish that is lacking in strength,
The fish that is useful to point out the way, The fish that is one rod in length.
The fish that is something that happens by chance, The fish that is pulverized chalk,
The fish that tastes best when 'tis cooked on a plank, The fish that finds fault in its talk.
The fish that looks sullen and thrusts out its lips, The fish by canary birds pecked,
The fish that in winter glides oven the ice, The fish by which warships are wrecked.

The fisly that is titavelled by those who pay toll, The fish that is part of a shoe,
The fish of low spirits and greatly depressed, The fish that's unable to chew.

Sir Henry Campbell-Bannerman is, at the age of seventy, virtually the chief executive of the British Empire. But if Sir Henry, when he was fifty-five, lat applied to some boards of education we have heard about, for a position as superintendent or principal of schools, he would have been rejected as being too old. Yet at that age every man who has a sound constitution and is living the right kind of life should be in the prime and vigor of his manhood. Behind hims are the varied and valuable experiences of a long life. He is not daunted by difficulties, for he has met and vanquished battalions of them. He is not unduly elated by victories nor depressed by defeats. He is fully equipped for the work before him, and is in every way qualified to be to the children and youtls under his charge a guide, philosopher, and friend.--The Western School Tournal.

## Lines inj Season

Two eyes and only one mouth have we. The reason I think musi be-
That we are not to talk about Everything we see.
Two ears and only one mouth have we. The reason is very clearThat we ate not to talk about Everything we hear.-Sil.
"There is so much bad in the best of us, And so much good in the worst of us, That it scarcely behooves the most of us To talk about the rest of us."-Sel.
Paticnce, oh Soul! from a little field
There cometh often a gracions yield.
-Carlolta Perrs.
Hope is like a slender hare-bell,
All a-t:emble from its birtl?;
Love is like a fragrent rose, Checring, blessing all the earth; Faith is like a lily whi.e, lligh uplifted into light. -Christina Rosseti. (Adapted)
Hurried results are worse than none. Wic must forge rothing but be partakers of the divine patience. If the:e is one thing evident in the world's history, it is that Gud hasteth not. All haste implies weakness. Time is as ch all as space and matter.-Giorge MacDonald.

Let us be content to work
To do the thing we e n, and not presume
To fret because it's little.
-Elizabeth Barrelt Brozoning
Square thyself for use. A st ne that may
Fit in the wall is not left by the way.

- Persian Prozerb
lle that is goved at making cxcuses is scldom good for anything else.


## Pussy Willow

In her dress of silver gray, Comes the Pussy Willow gay, Like a little Eskimo, Clad in fur from tip to tre.
Only Mother Willow knows
How to make such suits as those
How to fashion them with skill,
How to guard against a chill.
Did she live once long ago,
In the land of ice and snow?
Was it first by polar seas
That she made such coats as these?
Who can tell? We only know
Where our Pusy Willows grow
Fuzzy little friends that bring
Promise of the coming spring.
-Elizabeih Foulke, in Ginn's Music Course.

## Tree Quotations From the Bible

I will plant in the wilderness the cedar tree, and the myrtle, and the oil tree; I will set in the desert the fir trec, and the pine and the box tree together.

They shall spring up as among the grass, as willows by the water courses.

He heweth him down cedars, and taketh the cypress and the oak, which he strengtheneth for himself among the trees of the forest; he planteth an ash and the rain doth nourish it.

All the trees of the fiedd shall clap their hands. Instead of the thorn shall come up the fir tree, and instead of the brier shall come up the myrtle tree, and it shall be to the Lord for a name!

## Waste of Time.

To save time there is need of the utmost order. I visited a school, not long since, where fully half of the time was wasted, so it seemed to me. (i) The classes had begun when a pupil entered late. The teacher entered into a conversation as to why, and it took fully five minutes, meanwhile a class of cighteen were standing waiting-ninety minutes were thus lost, besides the rest of the school stopped studying to hear the upshot. (2) The class in arithmetic was called and the teacher asked one to clean off the board; the eraser was so full of dust that he was directed to go out and clean it ; this took five minutes, at least. (3) The whole school was st mped for writing; then the teacher distributed the books. Some of these had been misplaced and fully five of the twenty-five minutes were used up in getting going; as there were thirty-eight in the school there were 190 minntes wasted. Now this was called a good teacher; he had taught seven years; he was not conscious of the waste of time; he made a business of doing it; he did it day by day. Of course, there could not but results be accomplished, only a part of what might have been done.E.rchange.
[It is hoped teachers who read the Review do better than that; but there may be cases where the schonl time is wasted, in some instances like the above, or in other ways. Have a little quiet examination of ways and means--Editor].

Andrew Lang includes "month" in his list of 60 English words that have no rhyme. He apparently never has heard the old verse of the mathematical sturlent:
The Nth term an: the $[\mathrm{N}+\mathrm{I}]$ th
Have troubled my mind for many a month. -Nea York Tribune.

## The Efficient Teacher

The most efficient teacher is she who acquires the skill to reach the entire class as though they were one, making each pupil feel as though he were receiving the full measure of her instruction. The orator who wins has this ability. A man of platform genius will hold everyone of bis audience more intently than as though he were facing him alone, for the hold he has of him will be enhanced by the magnetism of hundreds of electrified minds. Each keen listener multiplies the power of the orator, and the teacher should keep the highest standards before her. She must be to the class what the orator is to his audience, holding the influence of each pupil with more direot interest than she could if she had lim before her alone. Her influence should be multiplied by the electrifying force of the entire class. Forgetting this, many teachers miss their golden opportunity by being too individual in their instruction, losing forty pupils, and leaving them free for mischief while dealing with the one. This may be needful at times, but the occasion is rare. Reach the one through the many is the highest principle for the schoolroom to adopt. It does not come as the attainment of a day, but it is sure to come to whoever will pay the price in brains and patience.-American Primary Teacher.

## Some Language Methods

One of the best devices for teaching language to young children is a system of questions and answers. The questions may be written on the board and the answers given orally or written. Or the questions may be written on cards and the cards distributed to the children, who write the answers.

The questions should be simple, but require a complete statement in reply and correct use of tenses Questions like the following are good:

How many windows are there in this room?
How many doors are there in this room?
In what part of the room is the teacher's desk?
How many children in your class?
What is your teacher's name?
Who was your last teacher?
What do you do at recess?
Where do you live?
What is your father's name?
How many brothers and sisters have you?
When was your last lirthday?
How old were you then?

How many times were you absent this week?
What day is it?
What month is it?
What season is it?
What was the weather yesterday?
What do you think it will be tomorrow?
Did you see any birds on your way to school?
Can yout tell their names?
What flowers did you see?
What flowers blossoms at this season?
What trees bear fruit at this season?
What trees bear acorns?
What animals eat acorns?
What trees bcar nuts?
Did you ever pick any nuts?
What kind of nuts do you like the best:
Where do they grow? etc., ete.
Popular Educator.

Writing of exercise for children in the February Delineator, Dr. Grace Peckham Murray says: "When children are old enough there is no better exercise than brisk walking. To be of benefit it should be brisk enough to bring the blood to the surface, and to expand the lungs. Running increases the endurance. Systematic running should enter more largely into the exercise for children. Running strengthens the leart, increases the breathing capacity and develops the muscles of the whole body. Like all violent exercise in which children indulge, it should be taken under the supervision of a teacher to avoid overdoing.
"An ideal way for children to pass the summer is in camps under the judicious care of a teacher and guide who can enter into the games and feelings of the boys and girls. I believe in the same education in these matters for girls as for boys. They can then become acquainted with wooderaft, botany and geology and increase their health by tramps and explorations. The prinitive which exists in all, whether of younger or older growth, has a chance to show itself, and it improves the health, for it does not do for children any more than for adults to be too civilized."

Any subscriber having extra copies of the February and March numbers of the Review will confer a favor by sending them to us.

[^12]
## Review's Question Box

A. B.-Please solve the following, and what is the value of the dot in the first question?
Todhunter \& Loney Algebra I'age 124, Examples XLVII. Question 36; also
(3) Please give what you would consider (a) a correct definition of participles, gerund and verbal noun, and (b) how you would distinguish them in a sentence, (c) bow would you parse each named above.
(4) What is the reaction when water is put on lime, and what gas is given off.
(1). Find the value of

$$
\begin{aligned}
& \frac{1}{(x-1) \cdot x \cdot(x-1)}-\frac{1}{(x-1) \cdot x)}+\frac{2}{(\times-1)(x+1)}= \\
& \frac{1-(x+1)+2 x}{(x-1)(x+1) x}=\frac{1-x-1+2 x}{x\left(x^{2}-1\right)}= \\
& \frac{x}{\left(x^{2}-1\right) x}=\frac{1}{x^{2}-1 \text { Ins. }}
\end{aligned}
$$

The dot is used to express multiplication by many mathematicians. It is not needful in this question, but is especially useful fur the sake of brevity between numbers. (See page $34 \overline{5}$, paragraph 444).
(2). Find the value of
$\frac{a x^{\mathrm{m}}-b x^{\mathrm{n}}+1}{a^{2} b x-b^{3} x^{3}}=\frac{x^{\mathrm{m}}(a-b x)}{b x\left(a^{2}-b^{2} x^{2}\right)}=\frac{a^{\mathrm{nn}}(a-b x)}{b x(a-b x)(a+b \cdot r)}=$ $x_{m}$
$\overline{b x}(a+\overline{b x})$
Divide by $x$ in both numerator and denominator, since $x^{1}$ is less than $x^{m}$ if $n$ is an integer.

$$
\text { therefore } \frac{x^{\mathrm{m}}}{b x(a+b x)}=\frac{x^{\mathrm{m}-1}}{b(a+b x)} \text { Ans. }
$$

(3). Any good grammar will ansuer your question much more fully than our space will permit. We can send you one if you desire.
(1). $\mathrm{CaO} \mathrm{O}+\mathrm{H}_{2} \mathrm{O}=\mathrm{Ca}_{2} \mathrm{H}_{2} \mathrm{O}_{2}$. That is, when water is poured on quickline $(\mathrm{CaO})$ the product is slaked lime. No gas is given olf. The heat is so great when the reaction takes place that a portion of the water is converted into steam with which the funes of the slaked lime mingle.
X. Y. Z.-"W'ill" used with the first person denotes determination and "shall" denotes futurity. There is a lesson in the new Nova Scotia Reatler which seems (ur contradict that. On page $4 t$ of the No. 6 reader Sir Guym says to Mammon after he is determined not to take the latter's treasures, "I shall not." Should it not be "I will not?"

I have not the Nova Scotia Reader, but as I cannot find the words quoted in the poem referred to (Spenser's "Fiaeric Queene," Bk. II. Canto VII), I conclude that the reader gives a summary or a paraphrase of the passage. The words "I shall not" may perhaps mean "I do not imend to."
H. C. C.
L. S.-A subscriber would like to know where ine ruotations: "the long gray fields at night," and "the dawn comes up like thunder," which are given on page 216 of the February Review, may be found.

The second quotation is found in Kipling's poem "Mandalay." The first perhaps refers to rice fields. It may' be from Kipling. Can any reader tell where it is found?
W. M.-Draw an outline showing the (a) grouping e, E the land masses of the eartil (b) the zone of fracture and explain the latter fully.
it is not necessary to print the map, if it is described so that I can understand it.
(a.) That is very well shown in a map of the eastern and western hemispheres, divided by the twent'eth meridian.
(b.) The term "zone of fracture" is sometimes used to mean the ontside layer of the earth's crust, extencling from the surface to a depth of abont a mile, in which the rocks are of such a character that the pressure from within has simply fractured then. But in the question quoted the term is doubtless applied to the continuous chains of mountains extending from l'atagonia to Alaska, and from the North of Spain to the Matay Peninsula, which ranges were formed largely if not mainly by the upthrust of igneous matter through the lines of fracture.
H. C. C.

Our sclool is a comntry one and we are fortunate in having large grounds but unfortmate in the fact that the school board does not pay for the care of them. After many years of neglect we made a start in beautifying four surroundings. One-lalf the grounds were given to the girls, the other lualf to the boys. Then prizes for the best looking side were offered. Should the girls win, a chair swing was to be placed on their side; if the boys were successful, baseball bat, and catcher's glowe became theirs. Hours of patient toil and numerons gifts of plants, shrubs, trees, and grass seeds have worked wonders.-Sel.

The examiner in drawing calnnly and without suspicion wrote the following question: Which do Sun consider of greater practical importance to your pupik in their drawing, rupidy or cklicacy ?" and gasped in amazement when he read the answer:
"I think for practical purposes rapidity is the better, provided of course that the drawing is not too indelicate."

## Three Little Trees.

[Recitation for a tiny girl. Three other children stand near-as the trees-laughing, whispering, telling sectets, clapping hauds, etc., in pretty pantomine].

Sent by Miss Sadie Foster, Upper Rexton, N. B.
Way out in the orchard, in sunshine and breeze, A-laughing and whispering, grew three little tuees. And one was a plum tree, and one was a pear, And one was a rosy-cheeked apple tree rare. A dear little secret, as sweet as could be, The breeze told one day to the glad apple tree. Slue tustled her little green leaves all about, And smiled at the plum, and the secret was out. The plum told, in whispers, the pear by the gate, And she told it to me, so you see it came straight. The breeze told the apple, the apple the plum, The plum told the pear, "Robin Redbreast has come!" And out in the orchard, they danced in the breeze, And clapped their hands softly, these three little trees.

## Current Events.

Forty years growth of the British Empire has shown an increase of area from eight and a half million to neariy twelve million square miles, and an increase of population from two hundred and fiity millions to four hundred millions.

The Prince and Princess of Wales have completed a sive months tour of India, and are returning by way of Egypt.
The Britisin troops that now occupy the fortress at Esquimault, the last British garrison in Canada, will be withdrawn in May, A Canadian force will take possession when the Biritish troops vacate.
ln February, a company of native troops was massacred by native insurgents in Northern Nigeria. A British force, with the help of loyal chiefs, has crushed the revolt, the insurgent leader and some of his followers having been killed in battle.
$l_{11}$ Russia thenc are extensive farms on which nothing else is grown but suntlowers. The seeds are used for food, and the oil obtained from the crushed seeds is used in cooking.

The bad feeling that arose between Austria and Servia over a proposed commorcial minon of the latter country with Bulgaria has been allayed, and friendly relations are restored.

Hon. Luncan Cameron Iraser, judge of the Supreme Conrt of Canada, has been appointed Governor of Nova Scotia, the office having become vacant by the sudden death of Governor Jones.
The foreign trade of Canada is now three times as great as that of the United Sti.tes in proportion to population.

The new Russian parliament will consist of "wo chambers, the upper housc, known as the Council of the Empire, to consist of an equal number of elected members and members nominated by the Enperor, and the lower house, or National Assembly, to be wholly elective. The two houses will have equal legislative powers, and maly li.ils passed by both may be presented for the Emperor's
sanction.. The representative members of the Council of the Empire are to be chosen by the local representative assemblies called zemstvos, by the nobility and clergy, and by the universities and chambers of commerce; and there will be also members elected by the landed proprietors of Poland. All members must be forty years of age, and nust be graduates of some college. Its sessions and those of the National Assembly are to be public. There is to be a ministry responsible only to the Emperor, but the ministers are eligible as members of the lower house. Russian statesmen, in devising this, scheme, have had the advantage of a knowledge of representative governments in all parts of the world; but Russian peasants and artisans have yet to prove that they are fit to govern themselves, and the members of the old governing classes are very naturally afraid to trust them.

It is expected that the railway across the Sahara, whinin is to unite Oran in Algeria with Timbucto, will be conpleted before the end of the year. A part of it is alrealy in operation, and the Sahara Desert has now become a favorite winter resort, where good hotels can be found along the line of the railway.

Within a very short time steam is to be abolished as the motive power on all railroads in Switzerland. Waterfalls will supply the necessary power to sun both freight and passenger cars by electricity.

It is proposed to build a new Canadian railway from the eastern shore of Lake Huron to Montreal, on which electric motor engines will be the motive power. The object of the line, which will be some six hundred and sixty miles in length, is to keep within Canadian territory as much as possible of the grain carrying trade which now goes to the United States because Canadian lines are inable to handle it.

A severe press censorship has prevented details of the insurrection in Lruguay from reaching the general public, Lut it is now reported that quiet has been restored.
The Queen of the Netherlands is paying for concerts given in the slums of the Hague, at which only the poorest people are allowed to be present.
A recent French traveller has found that the Sahara, viewed as a desert, is much less extensive than has been generally supposed. He found a great steppe region lyung south of the desert, and finally merging into the Sudan, which, though now uninhabited, has at one time supported a very large population. Centuries must have passed sinse increasing drought drove its inlabitants southward to the Sudan region; but a rain belt is again creeping up from the south, extending farther and farther into the desert, and within this belt grasses have appeared and animal life is abundant. In Algeria and in Upper Egypt, increasing drought has followed the cutting away of forests within the last hundred years, while, it appears, increasing rainfall has been restoring to fertility this great Saharian tableland but a few hundred miles distant.
The famine in Japan continues, and must continue :until this year's crop is harvested. The people of Japan who gave so willingly to the support of the war have little left to give to their starving compatriots, and there is need
of all the help that has been sent or will be sent from Canada, and other lands.

Two great turbine ships for the Cunard Line, one sow building in Scotland and one in England, will soon be launched, and will be the largest and fastest passenger ships in the world. One hundred and ninety-two furnaces will consume the fuel to drive one of these ships at a speed of thirty miles an hour, and the ocean voyage will be shortened to four days from New York to Queenstown, if present expectations can be realized.
The Moroccan conference is still in session, with hopes of an ultimate agreement that will provide for the contrul of Moroccan affairs without endangering the peace of Europe.
Ras Makonnen is dead. He was the strongest and hest known of the subordinate rulers of Abyssinia, and the probable successor of King Menelek.
Chinese unrest is still a source of anxiety to all the uestern world. The feeling against forcigners extends to hatred of the ruling dynasty, for the Manchu rulers have always been regarded as foreigners by the Chincse proper since they first came as conquerors in 16.44 . Only their good government, according to Chinese standards, has enabled them to keep the throne.
The King's nephew, Prince Arthur of Connanght, passing tlarough Canada on his return from Japan, has now begun a six weeks' tour of the Dominion. He will be in the Atlantic Provinces at the end of this month.

There is still fierce fighting in the Philippines. Like the Dutch war against the natives of Sumatra, the war of the United States forces against their unwilling Malay suhjects seems to be endless. Complete subjugation by force is impossible, owing to the nature of the country, and peace without it is very improbable.

## School and College.

Dr. Trotter, the energetic president of Acadia University, has secured from Andrew Carnegie the promise of a gift of $\$ 30,000$, for the erection of a new science building. Whenever the one hundred thonsand dollars contributed by the people towards the second forward movement is in hand in the form of "cash or realizable securities," Mr. Carnegie will make gond his promise. This with the $\$ 100,000$ to be pald by Rockefeller, as a supplement to the people's contribution, should place Acadia in a good financial position. Dr. Trotter visited Now York in May last and preferred his request, with the consent of the Rockefellers, to the secretary of Mr. Carnegie. That this was not granted until ten months after may give some idea of the number of similar requests that had to be passed upon in the intervening time.
Miss Muriel Carr, danghter of Mrs. John deSoyres, nf St. John. N. B., has recently won a scholarship at Radeliffe Ladies' College, Cambridge. Mass.. which entitles her to a course of study at an English, German or French university. Miss Carr's choice will probably be Oxford, where she will have an opportunity to complete a course of stuty that has been unusually brilliant.
Mr. N. H. Gardner. of the Halifax mechanic science school, has tendered his resignation to take effect on May ist. Mr. Chas. W. Parker, who for two years has heerl principal of the Granville Ferry schnols, N. S., where he
carried on a class of card-board construction work, has been appointed by the board in Mr. Gardner's place.

Miss Margaret Kerr of Bocabec, Charlotte County, has been appointed to a scholarshap at Guelph, on the ansomination of Inspector Carter.

## Book Reviews

Mecianical Drawing. By S. A. Morton M. A.. Teazher of Mathematics in Halifax Academy. Cloth. Pages 110. T. C. Allen \& Company, Halifax, N. S.

This excellent little manual is divided into two partspart one being intended for grades seven and eight, and parts two for grades nine and ten, while a chapter is added for the use of manual training students only. The constructions are of an elementary nature and are derived chiefly from the first book of Euclid. The aim of the book is thoroughly practical, being designed to serve as an introduction to the study of geomet:y and manual training exercises.
Tue New Public School Drawing Course for Canadiat Schools. Bonks I and 2. Price 10c. each postpaid. The Canada Publishing Company, Toronto.
The models in these books are sucli as any pupil in the intermediate grades should be able to study and then form outlines of similar objects that have come under his own observation. This is the object of the books,-not for the pupil to copy the model drawings, hut to use them intelligently so as to be able to outline correctly the things that he sees like them. If used in this way the books cannot fail with a judicious teacher to lay a good foundation in drawing.
How We are Sheltered: A reographical Rcader. By J. F. Chamberlain, Ed. B., S. B., State Normal School, Los Angeles, Cal. Cloth. Pages 184. Price to cents. The Macmillan Company, New York. G. N. Morang \& Co., Toronto.
The author ve:y properly takes his starting point in the study of geography from the home surfoundings and relations. IIe shows in a series of lessons the homes of differcut peoples and how they are constructed, how food and clothing are obtained, with the incidental features of communtication and transportation. Thus the child is taught how his own welfare and happiness depend on the labouts and thought of others, and he realizes that he in turn should contribute to the lenefit of those about him,thus making the study of geography an aid to the formation of character. The book is attractively illustrated.
Practical and Theoretical Geometry, Paft II. By A. H. McDongall. B. A, Ptincipal of the Ottawa Collegiate Institute. Cloth. Pages 15t. Price 50 cents. The Copp Clark Company, Toronto.
This is an excellent supplement to the introductory course in geometry given in part I. It is intended for high schools and academics. The same accuracy and thoronghness characterizes its demonsarations and experimental work as in Part I. The author appears to have a genius for clearness and directness of expressinn ; and the discrimination he has shown in the selection and working up of his matcrial camot fail to he appreciated by teachers and students.

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This is a very successful attempt to gather into as compact form as possible those literary excerpts that bring c.ut clearly the leading events and characteristic conditions that have marked the development of the United States.

Biographical and historical no:es serve to make ach selection intelligible, and carefully chosen illustrations : dd to the attractiveness of the text.
Bryant's I'uems. Edited with introduction and notes by J. I. Casilemain, A. M. Cloth. Pages 238. Price 25 cents. The Mamillan Company, New York. G. N. Morang \& Co., Joronto.
This is one of the volumes of the neat pocket series of English classics that these firms are publishing. The introduction contains a life sketch of Bryant and an estimate of his works. The notes are full but many of them deal in explanations that need mot he explained.

Blackic's Modet Arithmetics, brok 5. price 3d. and the Teacher's Blackboard . Arithnctic, price $15.6 \mathrm{~d}_{\text {, }}$, have the currency in pounds, shillings and pence. A good feature in each is the placing of figures in large clear type. Blackie and Son, London.

In Blackie's. Story Book Readers there has been received A Poy Cousin, price 2d. Alon, In the l)ays of Chancer, A Pastra! Snte-fude; French Auxiliary and Regulas Verbs.
a good arrangement for junior classes, price 6d.; Palgrave's Golden Treasury, with index and notes, price 6d.; A Midsummer Night's Drean, in the Picture Shakespeare Series, with illustrations, introduction and notes. price Is. In the Blackie's English Classics Series we have Tennyson's Ode on the Death of the Duke of Wellington, Chaucer's The Squire's Tale, Byron's Ode to Napoleon, etc. Price 2d. each with introduction and notes. All the above are handy editions for class use. Blackie \& Son, London.
In Blackie's Little French Classics the following have lately been issued: Poesies Choisies, par Ronsard et La Pléiade; Histoive des Quatre Fils Aymon; Stable's Les Aventures de Tom Ponce; Nerval's La Main Enchantée; La Chanson de Roland; Dandet's La Derniere Classe, etc.; Bouilly's L'Abbé de l'Epée. Most of these are provided with notes and rocabularics, and range in price according (o number of pages, from 4 d . to 8 d . each. Many, such as the Song of Roland and the Fons Sons of Aymon are classics. All are by the best Fiench authors and are interesting and easy reading for young students. Their great merit consists in their attractive and convenient form, their low price, and the excellent and tersely written intruduction that accompanies each. Blackie \& Son. London.
In Blackie's English School Tc.its the following have been neceived: Bunyan's Pilgrim's Progress (Parts I and 2); Gibbon's The Age of the Antonines, containing the first three chapters of his famous history, The Decline ind Fall of the Roman Empire; Edmund Burke's Speeches on

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## THE EDUCATIONAL INSTITUTE OF NEW BRUNSWICK.


#### Abstract

The Executive Committee of the Educational Institu:e met at Fredericton during the Cloristmas vacation nnd arranged an interesting programme for the next meeting of the Institute. A number of the leading teachers of the Province will read papers or deliver addresses upon live educational questions. Prof. Jas. W. Rebertson, who has taken so much interest in public education in this Province, has promised to sprak before the Institute or to send a representative from Macdonald College, St. Anne de Bellcvue, of which institution he is manager.


## The Institute will meet at Chatham on June 27th.

Dr. Cox, who is chairman of the local committee, will see that all necessary arrangements are made for the entertainment of the members of the Institute.

A committee lias been appointed to arrange with the authorities of the Increolenial Railway for the transportation ot teachers at the most favorable rates.

JOHN BRITTAIN, Secretary Institute.


#### Abstract

America; Sir Thomas More's Litop:a; Macaulay's Third Chapter of his History of England. These are convenient editions in cloth of English classics sold for the low price? of sixpence each, and are useful to pick up and read during occasional spare moments. Blackic \& Son, London.


Blackie's Latin Texts have been designed especially ior schools. They are without vocabularies, but each has a very useful introduction dealing with the subject of the book and the author and giving select critical notes on the carly MSS., quantity, versification, favorite language levices of the author, etc. The plan is as excellent as in that of the other "1ittle Classics" published by Blackie-low price, convenience, and excellence of text being the ohicf features. The following among nthers previously noted in the Review have been issued: Virgil's Aencid, books I, 2. 3. 4; Ilias Latima (a metrical summary of Homm's Iliad) ; Casar's Gallic War, books 5 and 6; Livy, book 6. The price of the above is 6 . each, except the last which is 8d. Blackie \& Son, Iondon.

Sir Walter Scott's The Abbot and Charles Dickens's Rarnaby Rudge, edied for schools with introduction and motes. Cloth. Pagee 471 and 654 Price 2\%, and 2 - 6d. Adam and Charles Black, Lendon. The introduction in


#### Abstract

cacli case is seholarly and presents a sketch of the authon and a discriminating review of his works. The notes, and the glossary added to The Abbot, will prove very servieable to the student.


## Recent Magazines.

The Camadian Voice," by Jean Graham in the March Canadian Magazine, reminds one that some Canadians àt teast need to reform their vocal exptession; but "the women of the Maritime Provinces, have the most pleasing voices heard in our broad Dominion. The voice of the Ontario woman is usually heavy and squeaky, and the voice of Manioba is-well, it lad letter not be described
in British Columbia one hears softer accents again.:
In Jittell's Lizing . Ige for March 24. there is a timsly article on A Great Moral Cpleaval in America, quoted from the Ninctecnth Cintury and. Ifter. The writer reforring to the relations between the English and Amerienn nations say that the duty of the latter is "th know our kinsmen better, to study their ways closey, and form an accurate conception of that which they have done and are still doing."

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## OMISSION

In the Journal of Educatlon ol Nova Scotla, October, 1905, page 187. Prescrlption. for Grade XI.
By the printer's mistake there has been omit ted from the prescriptions for Girade XI in the October Journal of EdUCATIon for 1905, on page 187. The following prescription which is cor rect as published in the April edition preceding " PHYSICS.--11: As in Gage's Introdaction to Physlcal Sclence."

Practical Mathematics should be numbered respectively 12 and 13.
Education Office.
A. H. MACKA 15

Halifax, N. S.. Jan. 27, 'o6. Supt of Education.

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## CONTENTS



ST. JOHN, N. B., MAY, 1906
$\$ 1.00$ per Year.
likely to be published for some days yet to afford opportunity for it to contain the new elucational legislation of the late session.

Decorate your schoolrooms for Empire Day! The Review will send ten pictures, six of which are portraits of the famons Canadian authors, Carman. Roberts, Rand, DeMille, Howe, Haliburton, and four miscellaneous subjects, to the subscribers who pay their subscriptions one year in advance, all arrearages being paid to date. Compare the number on your address with this number of the Review. Send at once. There is only a limited number of pictures. First come, first served.

We have before referred to the valuable work done by the League of the Empire and its Monthly Record, which is published in London. The objects of the League are to further friendly and educational intercourse between the schools of the Empire. Each month the Record has some excellent suggestions to teachers and pupils in regard to correspondence between schools, offers of prizes for essays, and art designs open to competition for schools throughout the Empire. We strongly recommend it to teachers. The price is only two-pence a year, post free. Address the Editor, Monthly Record, League of the Empire, Caxton Hall, Victoria Street, Westminster, London, S. W. Teachers or scholars might find it of advantage to organize clubs and send their sulsscriptions collectively.

Dr. Ian C. Itamah, of Windsor, N. S., referring to the League and its Record, says: "It seems to me to be specially uscful to give the rising genera tion of Canada a wider interest in imperial matters not in any jingo spirit, but with the object of broarl ening their minds by letting them realize the vast responsibility laid upon our race to govern so many Asiatics according to the best traditions of the East: to provide millions of Negroes witli a paternal and sympathetic administration, and at the same time to work out all the complicated problems connected with the settlement of new lands by our own people. 1 am very sure it is a most wortly object."

## The Schools of Nova Scotia.

The anntual report of Supcrintendent MacKay, of the Nova Scotia schools, has been published, and its details are of great interest. Its review of conditions and progress in every department of educational work, in a closely printed volume of nearly 250 pages, is a very masterly one, and evidently no pains has been spared to obtain complete and accurate information.

In every department the report shows an improvement over the preceding year. The sections without schools decreased from 240 to 165 . The number of schools in operation increased from 2,331 to 2,429 , a gain of 98 ; the common school pupils increased from 89,87 I to 92,966 , a gain of 3,095 ; and the increase of high school pupils was 296 , with an increase over the previous year of 372 pupils who successfully passed the examinations. There was a great improvement in attendance, although the winter of 1905 was the stormiest for a generation past. The ratepayers paid $\$ 15,000$ more for salaries and current expenses of schools. School libraries increased from 169 to 208, and school gardens from 79 to 208. Teachers' licenses to the number of 756 were issued, but out of 2,566 teachers employed, only i,068 were normal trained, a serious defect when one considers the excellent cducational status of Nova Scotia's Normal School. Four hundred and forty-one new teachers entered the ranks last year, and only 148, or one-third of that number, were in training at the Normal School! It is encouraging to note, from the superintendent's report, that "this discrimination against trained teachers is likely, in the near future, to be lessened," and that there is a growing appreciation among school boards for normal trained teachers.
Little increase is noted in the consolidation of schools, but many of the inspectors are taking measures to have weak sections unite for that purpose. No arrangement has yet been made to continue the consolidated school at Middleton after the present year, when the support of Sir Wm. Macdonald is to be withdrawn. It is not likely, however, that the people of the eight districts represented in the school will consent to return to early conditions.
The reports of the inspectors and Supervisor McKay, of Dr. Soloan, principal of the normal school, of Mr. Percy J. Slaw, director of school gardens and the Macdonald nature-study department, and
the pupils' exercises at the Middleton school, all form instructive reading, and furnish many evidences of educational accomplishment.

## The Schools of P. E. Island.

The report of Dr. Anderson, chief superintendent of schools for Prince Edward Island, white it contains some encouraging notes, refers plainly to educational conditions that should not exist in a progressive province. " An average attendance of 60.33 of the number of pupils eurolled is much below what it ought to be," says Dr. Anderson. The number of schools in the province, 475 , was five less than in the preceding year.
"The time was in this province, and that not long ago, when the number of men engaged in teaching greatly exceeded that of women; now, however, there are 324 of the latter and 246 of the former." This proportion, as Dr. Anderson knows, is perhaps larger than in any other province of the Dominion or in the United States.

The enrolment of pupils for 1905 was 19,272, a slight increase over the previous year, but the enrolnent was larger a quarter of a century ago than it now is, the diminution of population being mony in part accountable for this.
The local assessment for the support of schoois was only $\$ 45,695$ out of a total expenditure of $\$ 168,592$, the balance, $\$ 122,897$, being paid by government. This is too large a sum to be paid hy the province in comparison with the very small total contributed by the ratepayers. We are prepared, therefore, to hear that the salaries of teachers are inadequate, notwithstanding the fact that there was an encouraging increase in the supplements paid them during the ycar. "In this province in 1905, 14 men reccived \$180 and 20 women $\$ 130$ as their annual stipend as teachers. The highest salaries paid to men and women in the public schools are $\$ 870$ and $\$ 360$ respectively." In the case of the poorest paid teachers, fifty cents and less a day! The inevitable result follows: "The schools are entrusted to incxperienced youths, who in turn wi!l leave when they are beginning to be capable teachcrs."

And yet in spite of these unfavorable conditions. Dr. Anderson finds in lis numerous visitations that the work done in very many schools is excellent and lighly creditable to the teachers.

## A Few Early Flowers.

Do you like to gather flowers?
"Oh, yes, indeed!" you say.
Where do you look for them?
"In the woods-all around on the ground," you answer.
Did you know there were flowers over your head as well as at your feet?
As spring comes on, look up as well as down. See thow many kinds of flowers you can find upon trees, Did you know that trees had flowers?
"Oh, yes,"'you say, "peach trees, apple trees, pear trees, and all fruit trees have beautiful flowers upon them."
That is very true; but much more is true. Look at the beautiful flowers on the poplar, willow, hazel, and other trees.
Have you not seen those long, woolly flowers that look like eaterpillars? They come from a kind of poplar tree.
Begin to watch the maple trees very early. If you do not, their flowers will come and go and you will not see them.

- One kind of maple has little elusters of tiny red flowers. Another has beautiful green flowers upon it.
The beech and the hazel produce nuts, and the oak trees acorns. Each has flowers of its own. Perhaps they are not beautiful. You may not even gave seen them.

Perhaps you have not thought of their being there. But each spring these tiny flowers come and do their work (what is their work?) and go away. In the fall you will enjoy the nuts they have lielped to make.
Will you not begin to watch the trees very soon? Look at the different kinds of buds. See what comes out of each. See if you can find any tree that does not have some kind of a blossom.-School and Home.-Adapted.

May is the month to keep the children on the watch for early spring flowers. Sheltered places, especially those at the foot of a hillside or on tle: edge of a grove facing the sun, may be examined for some of those flowers referred to in last month's Review-the mayflower, red maple, hepatica, ad-der's-tongue, spring beauty, violets. Some may be searched for on the ground and on the trees, such as the blood-root, coltsfoot, dandelion, strawherry, the red blooms on the hackmatack and hazel. Nake a flower calendar, as suggested in the April Rbview, and keep a record of the date of finding each plant in bloom, with the name of the finder. If you blo not know the name of the plant, send a portion of it in an envelope to the Review, or to some other friend who will gladly tell you. Be sure to keep at bouquet or two of these brave early bloomers in water in the schoolromn so that all may see thenn. But rensember to leave plenty of them in their launts in the woods, where they love best to stay, where they look their prettiest amid the surromnlings in which nature placed them, and where other prople may have a chance to see and adnire them.

A beattiful white flower that appears in May is that of the blood-root or Sanguinaria. It may be
looked for in rich open woods. It rises gradually from the ground through the tightly twisted leaf in which the bud has been protected through the winter. The white flower displays in the centre a greenish spot, surrounded by a circlet of golden stamens. These lines are beattifully descriptive:

> A pure large flower of simple mold, And touched with soft peculiar bloom, Its petals faint with strange per fume,
> And in their midst a disk of gold!

The petals soon wither and fall. In contrast with their snowy bloon is the reddish-orange colour of the juice which oozes from the cut underground stem in drops, hence the name of the plant-Sanguinaria canadensis. The latter name implies that it was named and described from specimens first found in Canada. The Indian medicine men believed that the Great Spirit had given every plant some mark which would help them to know its use. Hence they supposed that the juice of the bloodroot would stop the flow of blood. It is now nsed as a remedy in chest diseases, and as an emetic. The Indians formerly used the juice for smearing their bodies and for staining various domestic articles.

The thilliums are other plants that bloom in May from tuber-like rootstocks which have been protected maderground during the winter. The painted trillium is a beattiful plant found everywhere in woods. Its large white p tals, painted at their base with purple stripes, distinguish it from the ill-smelling purple flowers of the birth-root (Trillium erectum1). The trillitums belong to the lily family. The nane, from latin triplmm, triple, makes these plants readily recognizerl by children who are cuick to see how well the name fits the three ample leaves, three esreen sepals which stay on through the summer, thare coloured petals which wither away in a few weeks, twice three stamens, three styles, and the pistil with its thres cavities in which the seeds are ripened. A local nane for the trillitun is the Trinity-flower. Seventeen species of trillimm are scattered over the American continent from (ieorgia to the Aretic regions; of these omly the e are found in the Xaritime provinces.

The fantiliar dandelion is too well known to need any deseription here Chikfren will find it a very carly riser, its bright yellow flowers opening lectween five and six o'elock in the morniner : they stay wide open all day and close again loctwern eight and nine odock in the evening. This was one of the plante selceted by Limments for his boral chek: but it did
not work well on wet days, when the dandelion flowers insisted on staying in bed. Schoolboys in Italy earn an honest penny by collecting the leaves as food for the silkworm when mulberry leaves are scarce. In this country people use the leaves for "greens," and wholesome food it is if we do not mind the slightly bitter taste. The dandelion is well worth studying in the way it protects its flowers in wet weather, and the down it provides for carrying the seeds. Children will be interested in the name "blow-ball," which is sometimes given to the dandelion; and there is a trick of guessing what o'clock it is by vigorously "blowing" the downy tufts from this "ball;" the number left tells the time of day.

## Our Native Trees-X.

By G. U. Hay,

The Elat and Beech.
Although the elm and beech belong to different families, they are so marked as shade trees that they may be taken together here.

The elm (Ulmus americana) is one of our most beautiful and statcly trees, so often selected for shade and ornament that one scarcely thinks of it as belonging to the forest. Yet it is found in abundance near water courses and in damp and moist soils throughout the Maritime provinces and eastern America. It attains its greatest luxuriance on rich intervales along our rivers. No shade tree can surpass it for beanty of foliage and form. Sometimes it may be scen as a single shaft, with branches near the top and with tufts of short leafy twigs covering the long slim trunk from near the ground upwards. This is the feathered elm. Usually it has an entirely different habit of growth, sending up to the height of twenty feet or so a massive trunk, which divides into stout branches shooting upwards and continuing to throw out smaller branches and twigs as they ascend. The latter have that drooping and spreading habit which give the tree the vase-like form so well known along our rivers. Such trees spread their shade invitingly over the greensward beneath. This is the form of elm so characteristic of the lower stretches of the St. Joln river.

Under the cooling shadow of a stately Elm, Close sate I by a gondly River's side.
Sometimes the elm branches, starting out from the trunk near the ground, sweep upward in a large and beautiful curve, sending their tips ontward in a far reaching circle almost touching the ground.
and giving the trce the appearance of a huge ball when viewed from a short distance. The fine elm tree near the Normal School, Toronto, and many other famous elms, have this form; but so great is the strain when the tree is loaded with wet foliage that the branches are liable to break off at or near the trunk. The elm, as it advances in age, especially in higher and cultivated grounds, is very likely to assume this form; it is in the younger elms and those growing in the rich alluvial meadows that its stately outlines and graceful curves may be secn to best advantage.

The elm needs an abundance of water and rich soil; when these are provided its growth is very rapid, and it will become a good sized tree in from fifteen to twenty years. Most elms reach the height of their locanty in fifty years or so. They decay carly; but instances are not rare, especially in those of the rounded form, where they reach an age of several hundred years. The famous Washington elnu, in Cambridge, Massachusetts, under which George Washington took command of the Continental army in 1775, is certainly more than two hundred years old; but this is now decaying and cannot last long.

Many instances are reported of the distance that elm roots will grow in search of water. Some years since a drain in the vicinity of Paris was stopped up, and on digging down to discover the cause it was found that it had been clogged with a growth of. roots which proceeded from an elm tree nearly nearly fifty feet distant. (When roots grow in water they develop great masses of rootlets, which was the cause of the clogging).

The flowers of the clm precede the leaves in early spring. They are of a yellowish tinge and hang in close, conspicuons bunches from the ends of twigs. They are very simple in structure, each with a small bell-shaped calyx, with four to nine stamens on long slender filaments, and an ovary laving two short styles. During the few days that the flowers remain open they are crowded with bees. The oval leaves are simple, with a sharp point, and their edges are usually doubly-serrate. The seeds mature very rapidly ; eaclı is provided with a wing which grows about it in the form of a circle. If the seeds be collected and planted in moist soil early in June they will grow almost immediately, a hint for those who may wish to cultivate this fine shade tree. It is interesting to note that while the leaves of thee clm are alternate. the first pair in seedlings are opposite.

The wood of the elm is hard, strong. tough, compact. The difficulty of working it prevents its general use as timber. Its fibres hold tenacionsly together; and as the wood has no special beauty compared with the maple, cherry or some others, it has no special value for furniture. It was formerly used in ship building; and the tough wood is useful for ox yokes, wagon supports, hubs of wheels and similar purposes where there is a cross strain. A cubic foot weighs 45 pounds. The bark is tough and strong, and has been used for making ropes and chair bottoms. The wood makes good fuel and yields an abundlance of ash.

## Tue Beech.

The trim, neat appearance of the beech (Fagas americana) when growing in the forest has given it the reputation of being the "best clressed" tree of the woods. It has a tall graceful trunk, with thin, smooth, closz-knit bark, ash-grey in colour, with darker and lighter shades, but becoming paler in winter. Its green leaves turn to a rich reddishbrown or amber colour, and in autumn remain longer on the branches than those of other deciduous tress. Frequently trees in the deep woods retain their withered leaves throughout the winter. Its green leaves are not liable to attack from any insect. The smooth shining appearance of its twigs and the polish of its shapely, conical winter buds add to its trim appearance.

The beech frequently attains a height of from 75 to 100 feet, with a trunk diameter of from two to four feet. When growing in open fields it is much less in height. but often attains a considerable circumference. Its spreading branches help to give it the dense shade for which beech forests are remarkable. While there is an abundance of flowering plants to be found on the ground in oak woods, few are to be met with under beeches. This is perhaps due to the dense shade. A curious brownish-y:1low plant, from six to twelve inches in height, is sometimes found in great abundance under beach trées in late summer and autumn. This is a parasite, called beech-drops, which draws its nourishment from the roots of beech trees to which it is attached.

The beech is one of the most widely distributed trees in north-eastern America, and many of our sucalled hardwood ridges are clothed principally with this tree, along with birches and maples. The flowers which appear at the same time with the leaves are of two kinds, staminate and pistillate. The
former are yellowish green, growing in tassels or heads; the latter usually in pairs on a short stalk. The fruit is the well-known triangular nut which is enclosed in a bur. The hurs open and the muts fall soon after the first frosts of autumn. There is a saying that beech-nuts are abundant only once in seven years. This would be an interesting question for some one to follow up. to find out whether there is any foundation for the saying, and if there is, to ascertain, if possible, the cause. Another saying about the beech tree that requires to be investigated is that it has never been known to be struck by. lightning.

The wood of the beech is hard, totugh, and closegrained. A cubic foot weighs 43 pounds. In colour it is light or red, giving rise to the belief among country people that there are two kinds. the white and red. There is but one species known in these provinces. The difference in colour in those noted above may arise from the more or less rapid growth of the wood. The texture also of the white beech is tougher and less liable to warp; that of the red is more brittle.

The wood of the heech makes the best of flooring. It is used also in chair-making and turning, for sawhandles, bench planes, and for many other purposes. Its wood makes excellent fuel.

It is difficult to transplant beeches, because they usually grow attached to one another under ground. But to cultivate a young tree from a beecli-mut is an interesting experiment, if only to motice the two wide and thick first leaves (cotyledons) that appear alove ground, and growing up between them the little stem bearing the true beech leaves.

## The Clovers.

The clovers have no time to play; They feed the cows, and make the hay; And trim the lawns, and help the bees, Until the sun sinks througli the trees.

And then they lay aside their cares, And fold their hands to say their prayers. And drop their little tired heads And go to sleep in clover heds.

Then when the day dawns clear and bluc. They wake and wash their hands in dew, And as the sum climbs up the sky They hold them up and let them dry: And then to work the whole long day; For clovers have no time to play.
-Helena Lecming Jeliifor,

## Raleigh Anticipated Darwin.

## To the Editor of the Educational Review.

Dear Sir, - In perusing Sir Walter Raleigh's History of the World, published in 1614, I have just come across a passage which seems to me of the greatest interest as showing that Raleigh anticipated Darwin in realizing :
(I) That species are not immutable.
(2) That they are affected by environment, especially climate.

As I do not think this passage is at all well known, 1 venture to transcribe it for the benefit of your readers. It is from chapter vii, sec. 9, and the author is seeking to prove that the ark was large enough for the then existing beasts. "But it is manifest, and undoubtedly true, that many of the species, which now seeme differing, and of severall kinds, were not then in rerum natura. . . . . And whereas by discovering of strange Lands, wherein there are found divers Beasts and Birds, differing in colour or stature from those of these Northern parts; it may be supposed by a superficiall consicieration, that all those which weare red and pyed Skinnes, or Feathers, are differing from those that are lesse painted, and weare plaine russet or blacke; they are much mistaken that so thinke. And for my own opinion, I find no difference, but only in magnitude, between the Cat of Europe, and the Ownce of India; \& even those Dogges which are become wilde in Hispagniola, with which the Spaniards used to devoure the naked Indians, are now changed to Wolves, and begin to destroy the breed of their cattell, and doe also oftentimes tear asunder their owne children. The common Crow and Rooke of India is full of red feathers in the drown'd and low Islands of Caribana; and the Black-bird and Thrush hath his feathers mixt with blacke and carnation, in the North parts of Virginia. The Dog-fislı of England is the Slarke of the Soutl, Ocean: For if colour or magnitude made a difference of Species, then were the Negro's, which we call the Blacke-Mores, non animalia rationalia, not Men, but some kind of strange Beasts: and so the Gyants of the South America should be of another kind, than the people of this part of the World. We also see it daily, that the nature of Fruits are changed by transplantation, some to hetter, some to worse. especially with the change of Clymate. Crabs may be made good Fruit by often grafting, and the best Melons will change in a yeare or two to common Cowcummers. by being set in a barren Soyle."

Sincerely yours: Tin C. Hanxan.
King's College, Windsor, N. S., 2qth April, Igo6.

# Our Coasts. II-Their Lessons. 

Continued.

## The Agents at Work.

Professor L. W. Bailey, LL. D

It will be interesting now to note some of the special peculiarities of the muddy deposits, both for the reason that they are so conspicuous and cover such large areas about the head of the Bay of Fundy, and because in comection with them are found certain features which are of the greatest service in throwing light upon the events of periods long antecedent to our own.

The extent of the mud-flats laid bare by the $b$ of the tide along portions of the coast of Albert and Westmorland counties, New Brunswick, and the shores of Minas Basin, Nova Scotia, is very large, their breadth being in some instances a mile or more, The mud itself is of a bright red colour, extremely fine and tenacious, the redness being due to iror oxide contained in the rocks from which the material was derived, while the fineness is the result of the long continued trituration of the same material under the action of moving waters. This material is constantly being deposited, the tide at each flood spreating a thin layer over those previously laid down, while at ebb the whole surface is laid bare and $\because \mathrm{x}-$ posed to any influences which may operate upon it. One of these might be a passing shower, every drop of which falling upon such fine and light material would leave its impress, to be subsequently buried and preserved under the new layers afterwards deposited. Or if, instead of rainy weather, there be a warm summer sun, the surface will dry, and by drying be made to shrink, thus producing numerous cracks or small fissures, also to be buried later as a new tide comes in. One may sometimes see the whole surface of a mud flat loneycombed by these shrinkage cracks. Or again, as "worms come out after a shower," even in our streets and fields, so they do from their burrows on the tidal flats, and one may readily recognize not only their holes or homes, but also long, round trails extending in all directions over the muddy beds, marking where the worms have made their daily travels in search of food. Finally, the observer perchance may find an impression which he readily recognizes as the track of a three-toed wading bird, or another equally characteristic of sonv: domestic animal, or of man, and, like Crusoe on his desert island, he naturally infers that where such tracks exist there must recently lave been either bird or quadruped or man to produce
them. -Thus in addition to the evidence afforded by the rounded pebbles of a sea wall or the sand-grains of a sandy beach, as to their origin as beach deposits, so the fine muds tell an equally legible and still more interesting story, one which "he who runs may read." Evidently, armed with such means of recognition, the student can pass from the gravelly and sandy beaches, or from the muddy tidal flats of today, and finding what are practically the same things in the rocky ledges, or in the extensive marsh lands which skirt the bay, will reach the conclusion that they, too, must or:ce have been at or below the sealevel, and were produced in the same way.

A word or two further as to the marsh lands. These are usually spoken of as the "dyked marshes," because, were it not for artificial embankments or dykes, they, too, would be frequently submerged, as indeed they sometimes are when through neglect or through extraordinary high tides, like those of the Saxby gale, the dykes are broken through and the " turbulent tides," as Longfellow expresses it, " are allowed to wander free o'er the meadows." These meadows are very extensive in both provinces, and are also of extraordinary fertility, producing crop after crop of fine grass without the aid of artificial manures.

I have space to refer to only one other interesting point connected with the dyked marshes. It is this: At certain points these marshes have been found to contain the buried but still erect trunks of upland trees. They occur several feet below the surface of the marsh, and of course as much below the level now reached by the flood tides. The; could not possibly have grown where they were subject to submergence under salt water; and he:ase the conclusion is forced upon us that the land bordering the bay is now lower than it formerly was. Indeed there is good reason for believing that not the Bay of Fundy trough only, but the whole Atlantic scaboard of America, is madergoing sulsidence. In Northumberland Straits the sinking is even more marked than in the bay. The sea is said to be attacking the ruins of old Fort Moncton, and from a cemetery near by is washing out the bones of certain unfortunates who, as recorded on one of the tombstones, were those scalped by the Indians.* Finally both in New Brunswick and Nova Scotia are to be found at many places remains of old Indian encampments, originally, of course, located above the reach of the sea, but which are now being con-

[^13]stantly washed and removed by the waves. In New brunswick such old encampments, marked by the occurrence of shells, arrow heads, beads, bones, etc., are to be se.n at Oak Bay, on the St. Croix river, at the mouth of the Bocabec river, and on Frye's Island; while in Nova Scotia I have observed them about Mahone Bay and at the head of Port La Tour.

Such movements as are indicated in the above facts are general in the earth's crust, but are not always domnzord. When in this direction they Jead to the submergence of the coast, the "drowning " of rivers (as will be discussed in a later chapter), the origination of islands, the decpeniug of harbours, etc. When in the opposite direction, they extend the const seaward, re-unite the islands with the mainland, kngthen the course of rivers, and for a time determine conditions of general miformity. If affecting larger areas, they may in places lift the land to mountain heights. In the next chapter we shall have to consider some of the effects of their elevatory movements.

## Letter From Northern Alberta.

Wr. 'W. B. Webb, writing fronn Astleyvilie. Alberta, April 12th. says: " We have lad a remarkably mild winter, with but little snow, not more than three inches, perlaps. Have lad none since lebruary ist. Wagons have been in constant use. The farmers have been at work since April 2nd, the land being very dry. Have had almost continuous sunshine all winter; the days are warm and pleasant now, but colder at night-fall. The Anemone is bloming, and the poplar trees are looking green with the banging catkins.
" The last few numbers of the Review have been especially good. The pictures are valuable and very helpful in many ways. The articles on the Coast by Dr. Bailey are particularly helpful; these ought to be especially so in Acadia-to use the old nameand such pictures are of great interest in prairie sections, as they help to impress the description that may he given of the sea-shore. Your article on trees ought to be very useful to teachers, but we have few of the trees in Abberta that you have described."

The Japanese do not allow their children to go to school until they are six years old. They claim to have scientifically proved that if a child goes to school at an earlier age it is both mentally aud physically detrimental.

## Lamb's Adventures of Ulysses.

Continued.

Notes My G. K. Butiek. M. A.

P. 135, 1. 5: Here the rocks are said to be smooth. What is the gencral character of rocks on the sea shore, and why are they thus? I. 8: Among the Grecks it was very common to (deify a river. 1. .): Meaning of the phrase "stayed his current?" 1.22: "V Voice spent" means what? 1. 25: The rack was one of the instruments of torture of the Middle Ages used to extract testimony from stublhorn witnesses or accused persons. Its use is mentioned in some of Scott's novels. 1. $3^{6}$ : The mame of the river, Calliroē, means a "beautiful stream."

1. 136, 1. 5 : The worl "insecure" is worth being studied in its derivation, " in," " se," " cura," " not abatt from care. 1. 14: l'arse the word "leave." 1. 21: What figure of speech in the expression "the zir breathed stecl." and what does it mean?
!' 137, 1. 5: Mcaning of the prep. "against" as found here? 1. 9: "Your reputation stands muc!," etc. What does this phrase mean? 1. 10: "Timety" means? 1. 12: "Vestments," often called "vesture," and Macaulay in the "Lays" has shortened it down to "vest." 1. 23.3 : Find the derivation of "primitive." 1. 35: Even then it seems the ummarried were expected to be more careful in their dress. Of course, like other old-fashioned things, the saying has died out, hasn't it? 1. 39: The Romans, too, when dressed for state occasions, put on their white togas. How strange to them would have appeared our black coats and silk hats worn on similar occasions now?
P. i38, 1. 13: What kind of oil would it be? 1. 17: Homer in the original speaks of how well the mules trotted on their way out. 1. 22 : Here we have, perhaps, the emrliest kind of washing machine. Of what kind of material would the chothes likely be made?
P. 139. 1. 27 : Delos is one of the islands of the Aegean Sea. If anyonte has Kingsley's "Heroes" and will look up "Thesens," he will find how the Aegem got its manc. 1. 30: Meaning of "past" in this line?
P. 143.1. 3: It may be remembered that the seer Tciresias was also blind, and that Homer himself was. 1. 11: Meaning of the word " jar" here? What part of speech is it? The oracie here is probably the famous one at Delphi. 1. 12: Meaning of "period" here? It is used in its more unusual semse of " ent" or " fmish?" 1. 16: Expressed to the life" means what? 1. .3y: Lokk up "prowess."
P. 146, 1. 33 : It will be remembered by those who have read Othello how the "fair Destemona" was won by similar tales.
2. 147, 1. 15 : "Massy plate," instead of "massy;" we more commonly used "massive." What is the meaning of "plate?" 1.28: Meaning of "yielded" in this line?
P. 148, 1.17: The length of his absence is said to have been twenty years in all.
P. 149. In the first book of the Aencid a goddess appears to Acneas in much the same way.
P. 150. 1. 18: "Were" is in what mood? 1. 19: Meaning of "wanting?" 1.22: If not too difficult for Grade VIII, "being dead" is a good bit of parsing to excreise their ingenuity on. 1. 30 : Telemachurs in its French form. Telemague is the title of a well known iale deating with this same story. Be careful of the pronunciation of Penclope. In those classical names cach vowel is somuded; $c$ is not usually silent at the end of a word as in English.
P. i5i, 1. 12: Meaning of "concert." How does the noun come to lave the meaning it does? 1. 28: " III" is not so often used as "evil" in this sense.
P. 152, 1. 7: Mcaning of phrase " in his time." i. 15 : Case of the noun " beggar." What would be its case in the sentence " his conduct became a beggar?" 1. 28: "Antipathy" from "anti" against "pathos" a feeling; just the opposite of "sympathy."
P. 154, 1. 4: "Will not stick to invent any lie." Explain meaning of this phrase. 1. 10: "On't" for the more modern " of it." As I mentioned before. Lamb, was a student of Elizabethan literature. 1. 39: Meaning of "forged?" How is this meaning comneeted with the other one?
1'. 162, 1. 34: " $A$ traveling Egyptian " with es would be called hy: what name?
P. Ifi.3. 1. 15: 'Those who have Kingsley's "Heroes" will remember how Jason carried a beggar across the Anaurus, and how it proved to be Hera, Quecn of the Immortals.

1'. 164. 1. 7: The famous Olympic games were celebrated at Olympia, in Western Greece. every fourth year. To win a prize at one of the events there was the highest honour a Grecian athlete could attain. Of such importance were they that the Greek calcndar was based on them, as we date from the birth of Christ.
P. 165.1. 1: Meaning of "stomach" here? 1. 37: Is four acres of grod "glebe land " a fair day's work for one man and team?
P. 166, 1. 27: Look up "spleen."
P. 167, t. $11:$ "Parse "one." What sort of a verl) is "became" here? 1. 27: Whatt part of speech is right?" Macaulay says,
"Kight well did suclı a couch befit
A Consular of Rome."
P. 156, 1. 18: "Brave" means what? 1. 21: Fiand derivation of "inclenent." 1. 25: "Casc;" Nacaulay in Horatius says, "Never 1 ween died swimmer, in such an evil casc." The whole story as told on this page well illustrates the character of L'lysses, the crafty.
P. 157, 1. 22: I think reference has previously been made to the fact that the Greeks drank their wine always mixed with water. 1. 29: Here we have the words "vests" in the sense already referreel of "vesture" or "clothing." Jove's cup-bearer was Ganymede.
P. 159, 1. 19: Parse the noun " house," especially its case; 1. 37: Be carcful of the meaning of the word "admire" in this line.

1. 160, 1. 18: "Bears" would inore usually be " keeps." " Still" could be here interpreted in its old sense of "always."
P. 161, I. 5: Who was "the king of the skies?" 1. 10: "Chiefest." If you toxk up the grammar I think you will find "chicf" given as one of the adjectives which can't be compared. Bith we find many writers using comparative and superlative degree of such adjectives as: " suppreme," "chicf," etc.
P. 170, 1. 15: The three Fates were conceived as spinning the thread of man's life, or, more correctly, one held the distaff, another spun, and the third cut the thread when complete.
P. 171, 1. 36: lior a fall accomm of this voyage read Kingsley's "Argomats" in the "Heroes."
P. 175, I. 3: loor the story of the way in which Athene got the shichl, read "l'ersens" in the " Herocs."

Canarlian mica has been increasing steadily in value from 1895 to the present time, and that of lantia has leen almest as steatily decreasing in value; so that, where in 1895 the inmorted value of furlian mica was nearly three times that of (anadian mica, the 10 ont Cobnadian micat stonel lighore than Indian.-Siciontific Americun.

The l'rovince of gucloce hats set abide the what. faspe l'eninsulat as a forest proserve.

## M1llet.-C'ontionuet.

Riy Miss A. Maciean.
" The Sower," which many consider Millet's best pieture, is at present in the Vanderbite collection in the Metropolitan Musellan. New York. It was painted at larbizon, lotit the peasant is of Millet's home place, such as he himself was when be worked in his father's lields. Nillet diel not patint froms models, be painted the type rather than the individual. "loce sower marches along with a lirn and serious step, scattering the seed on the stecp, greyisll brown hillside, clad in a dark red shirt, dark blace trousers that reach to the knee, dark greyish stockings wrapped round with cords of straw, rougla sabots, onl his feet, and a shapeless dull brown hat throwshisface into shardow. $\lambda$

flock of crows ly near, allid on the
hilltop another pheasant is linishing his day's work in a glint of the setting sun, while all the billside is in shadow.

Willet sent " "lowe Sower" to the Salon in 1850 , and of it (sathtier (forlec-ay) then wrote: "The nizht is coming, spreading its grey wings over the cirth; the sower marches with rythmelic step, flinging the grain in the fursows; lue is frollowed by a llock of pecking hirds; le is covered with rags. He is bony, swart and meagre meder his livery of poserty, yet it is life which his large hatnel sheds; he who lias aothing, pours upon the carth with a superl, gesthre the loread of the future. ()n the other side of the slopee, a last raty of the sun shows a pair of oxen at the end of their furrow-strong and gratle compantons of mant whose recomponse will one day be the shathgter-bouse. . . . . 'lobere is somathing grand in this ligure with its violant sestare, its prond ruggedness, which secons painted with :the very carth the sower is planting." 'This picture raised at storm among the critices. Some saw in it : revedntionist whor cursed tho rich and scattered shot akatinst the sky.

Though fixerd in at land that he likerl, hillot mever ceated to long for the brome of his early latys, where now his mostace and gramdmother were sinking madrer sickness, anxidy amd agre. Whan, worn ent the grandmother died, sorrowing till her labe bereath that she combld wot see her forancois, hill $t$ was over-


whelmed with grief. He did not speak for days, and his mute suffering was pitiful to see. When spoken to he could only sob, " Oh, why could I not have seen her once more!"

Now this mother was left with the responsibility of the farm. Her children were leaving her one after another. She felt that everything was giving way beneath her, and she wrote, "My dear child, you say you are very anxious to come and see me. 1 am very anxious, too, but it seims you have very little means. My poor child, this grieves me. Oh, I hope you will come, I can neither live nor die, I am so anxious to see you. If you could only come before the winter. Ah, if I had wings to fly to you! I end with kissing you with all my heart, and I am, with all possible love, your mother. Widow Millet."

But the poor mother waited, listening for a footfall, hoping for a surprise that never came. Francois waited, too, hoping that poverty would relax its grip and let him see his dying mother, but in vain. Then the patient little mother folded her poor, toilknotted hands and went to meet the God who would tell her what it all was for, and she would rest.

In the Salon of 1853 Millet exhibited "Ruth and Boaz," " The Sheepshearers," and the "Shepherd." They were much praised, and he secured a secondclass medal, and succeeded in selling all the three. But these wind falls scarcely sufficed to fill the holes made by a life that had always been hard and burdened with delt. His pictures usually would nut sell at all, or for ridiculous prices. But had he been so minded he need not have suffered. When Diaz heard that he had gone to live at Barbizon, he wrote: "What! Do you mean to tell me that you have decitled to live with brutes and sleep on weeds and thistles, to bury yourself among peasants, when by remaining in l'aris and continuing your immortal flesh painting you are certain to be clothed in silks and satins!" But Millet saw what he believed to be his duty, and did it-who has done better?

After a time he sold some more pictures and went home to settle up the estate with his eight brothers and sisters. He asked only for his uncle's books and a great wardrolee of oak, leaving his part of the house and farm to one of his brothers, requesting only that the old grap: vine should not be destroyed.

After his return to barbizon his fortunes improved, and he took his wife and family for a three months' visit to his old home. Gradually his mame began to grow. sume called him the singer of the peasants: others, the movelist of the sormows of the perple. and there was aronsed in some minds a world
of political and social problems. Though Millet was himself submissive to the unequal allotment of earth's good and evil, such pictures as the "Man with the Hoe" pressed home the fact of this inequality, so that men began to think seriously of it, and the human brotherhood of man is being advanced to-day by the martyr life of Millet.

The year 1855 was a lucky year for Millet. He sold his "Peasant Grafting" for 4,000 francs, and was able to pay his debts, and for a while paint in comfort. But care and actual want again gathered about him, though in the time of his greatest suffering, haunted by headache, and fear ever following him, he painted his most beautiful works, "The Gleaners," "The Angelus" and "Waiting;" this last suggested to him when he waited, hoping to go and see his mother. He had now grown to where he could paint the air, see the light, paint the invisible. In "The Angelus" he wished to give an expression of music, the sounds of the country, the church bells. Into this picture he put the whole strength of his coloring. When Sensier saw it, he said, " It is the Angelus!" Millet said, " It is, i.?deed; yout can hear the bells; 1 am content ; it is all I ask."

Then his "Death and the Woodcutter," one of his most beautiful creations, was refused by the Salon. In this he saw a deliberate design to hurt him, and straightened up to bear the burden. He said, "They wish to force me into their drawing-room art, to break my spirit. No, no, I will say what I fes!!" Protests arose over this treatment of Millet. Dumas (du-mä), the elder, wrote, "Who knows if the artist does not tell a story with his brush as we with our pens?' Who knows but that he writes the memories of his own soul?"

Of the large "Sheepshearer," Thore (to-ray) wrote, "This simple sheepshearer makes us think of the great works of antiquity of the most solid painting and best colour of the Venetian school." Of it Pellogutet (pel-lo-kay) wrote: " Here is great art, art that raises the mind; it is full of character. firmuess and grandeur; it reaches the highest style without effort-a large way of painting, serious and solid-which we can only accuse of excess of ansterity."

In 1862 he tried his highest venture and painted "'Winter." " The Crows," "Sheep Feeding," "The Woolcarder," "The Stag." "The Birth of the Calf," "The Shepherdess." and "The Man with the Hoe." In 1873 Millet had the satisfaction of seeing lis "Woman with the Lamp" sell for 38,000
francs, his "Washwomen" for 15,351, " Geese" for 25,000 , and the "Woman Churning" for 14,000 francs.

But now when the sun of prosperity is begimning to shine upon him, he is breaking down from the long struggle. He was seized with a dreadful hemorrhage, which greatly weakened him. He worked, nevertheless, and finished several pictures. Then came an order allowing him 50,000 francs for some decorative painting for the chapel of Sainte Geneviève. He was appalled and delighted with such an attractive task, but death prevented him from accomplishing it. When he knew death was near, he said, " I die too soon; I am just beginning to sec into Nature and Art."

The great painter breathed his last on the 20th of January, 1875. Everywhere his death caused regret; volumes of newspaper articles were written about him. His friends eloquently expressed their sorrow, and those who had been iudifferent were touched-alas, too late. France realized then what she had slighted and lost. A collection of his works was now sold for the benefit of his family, and people then saw how wide a field the master had covered, what variety of manner, what intense conviction. what strength and gracefuluess of handling. Sincle canvases that could scarcely find a buyer at any price when painted, have since sold for fortunes. "The Gleaners," which he sold for 2,000 franes, has since sold for 300,000 francs; "The Angelus," which lue had great difficulty in disposing of for 2.500 francs. sold irr 1889 for 553,000 . and in 1890 for 800,000 francs. But what matter-Millet has gone beyond the need of money-forever beyond the sad eartlicry.

## Learning Latin.

When Jane and I first wem to school
To Uncle Ebenezer,
He taught us of the stirring times
Of Caius Julius Caesar;
And how, when Zela's fight was won,
The message, terse and spicy,
The consul sent to waiting Rome
Of "Veni. Vidi, Vici."
But now our lyoy from school returus
A hundred times the wiser,
And glibly reads the latin text
Of Kyuse Yulius Kyzer;
Whose very words he"ll even quote
In accents quecr and squeaky,
To prove that what was really said
Was "Wany, Weedy, Weeky!"

## Art Study Notes.-V1.

Rev. Henter Boyd, Waweig, N. B.

## The Sower.

The picture selected for this month is a good example of the work of J. F. Millet. There is no difficulty about the title. Every scholar could mame it correctly, even if it lad never been sean before. Some peculiarities abont the man's shoes, or his hat, or the arrangement of the grais sack, will arrest the attention of superficial observers; but none can fail to note that the man is really doing what he professes to do. It strikes one that he is wholly mconscious of any observers. We are also impressed with his solid appearance ; the figure stands out from the landscape in a very remarkable manner. There is a kind of momentum in his movement that could only be acquired by a sower who had been striding over the furrows all day. Indeed as we continue to look at the man we almost expect the hand to advance for a fresh sutpply of grain. Every part is engaged in the operation; his work absorbs him; and thus we have tonity in the picture. one of the first requirements of all great art. The man is depicted upon a very narrow canvas, but we cannot help imagining the portion of field that has already received the grain, and the portion that will speedily be covered before darkness overtakes him. The picture is a good illustration of the saying that, "The beautiful is the fitting."

Tharticulars concerning the artist are given in another columm, and also in last month's Review. leyond directing attention to some of the main elements of Millet's style there is little occasion for explanation of the picture. Millet felt the strength, the seriousness, the intensity of the sower. It is ours to share the emotion.

## Wanted-Men.

God give us men! A time like this demands Strong minds. great hearts, true faith and ready hands; Aen whom the lust of office does not kill; Man whom the spoils of office cannot buy; Jen who possess oppinions and a will;

Aen who have homor,-men who will not lie: Hen who can stand lefore a demagogue,

And damn his treaclacerons thateries without winking! Tialt men, sum-crowned, who live above the foge In public duty and in private thinking ; For while the rable, with their thumb-worn creeds, 'Their large professions, and their little deeds, Aingle in welfish strife, lo! Freedom weeps, Wrong roles the latd, and wating justice sleep? -J. G. Holland.

## Answers to Queries.

E. L. K. The sentence, "What do these trees say to us?" was not intended to mean that the pictures "tell a story." What associations, what memories, are awakened! For instance, there are those to whom a group of beeches or birches mean merely so much cord-wood, or stove-wood. For others there will be a mental image of the restless leaves of the birch, and the dense shadow of the beech, or it may be a recollection of a nutting-party. What about the symbolism of these trees? Can you name authors or others with whom either of them were special favourites?

Gerald. Yes, I have seen the paragraph in The Western Teacher. It is surprising, that the editor admitted such statements concerning our monarch. The writer of the article evidently knows no more of the truth concerning King Edward VII than he does of the December number of the Educational Review and its supplement of Edwin A. Blashfield's picture. There was no need for stating that liberty is a British sentiment, it is more than a sentiment. If you were teaching school on the prairie, and as much at a loss to convey an idea of a huge boulder as some teachers are of the mode of swinging a luge bell, possibly one might recommend you ro procure a picture of "Plymouth Rock."
R. M. Sir W. C. VanHorne was born in Illinois, but has lived for many years in Canada, and all lis pictures have been painted in this country, so that he may well be described as a Canadian artist. True, he is not a "professional," but there are few who paint trees better than he does, and possibly none who love them better.
F. R. There is still a vesel in the British navy named "Temeraire." It is the third "Temerairs," and took a prominent part in the battle of Alexandria.

Atice, I do not know any book dealing exclusively with Canadian art and artists. Much information is obtainable from magazine articles. The Educational bepartment in the government of Ontario has .made special effort to secure reprocuctions suitable for schools, and occasionally pictures are purcliased for Toronto.

Robsert.t. The lark in France may differ from that in England, but 1 do not know. All the poetic allusions you are likely to meet with are based upon the lird ats it has beem observed in the latter country. It makes no difference in the picture. Ireton de.alt
with the song of the lark, or, rather, its effect produced upon the peasant girl.
G. F. Certainly ; in course of time certain principles may emerge which will guide in the choice of pictures for certain grades; and also principles for guidance in their use. There are books dealing with the matter, but not much attention is usually piven in any normal college course. A "picture study club" is a good idea.
H. B.

## The Review's Question Box.

A. A. B. What book would you recommend as better than Meiklejohn's English Language as an authority in grammar?
The text-books on English grammar are so many and of such varying degrees of excellence that it is difficult to select. For a short text containing the principles of grammar and their application, there can be no better than Dr. D. J. Goggin's Elements, published by W. J. Gage \& Company, Toronto. A more comprehensive work, so thorough that it leaves little to be desired, is Nesfield's English Grammar. Past and Present, published by Macmillan \& Com'pany, London.

In answer to a subscriber, L. S., asking where the quotation. " the long grey fields at night," is to be found, the Review suggested that it might be from Kipling. This is not correct. The lines are found in Temnyson's "May Queen," in the seventh stanza of the second part of the poem:
You'll never see me more in the long grey fields at night.
${ }^{\circ}$ Answers were received from Mrs. M. M. deSoyres, Miss H. S. Comben, St. John N. B.; Miss Evelyn R. Bennett, Hopewell Cape, N. B.; J. A. Bannister, Steeves Mountain, N. B.; H. A. Prebble, Hampton, N. B.; Miss J. E. Mullins, Liverpool, N. S.; Thos. Gallant, Belle Cote. N. S.; HI. Reeves Muroe, Taymouth. N. B.: W. B. Webb, Astleyvillc. Alberta: M. R. Tuttle, Elgin, N. B. Mr. Tuttle suggests that the reference is "to the long shadows which one would see in a country like England towards evening, or in New Brunswick."

A doctor prescribed rest and change for a small girl, saying that her system was quite upset. After he had gone, the little girl said, "I knew I was upsct, mamma, because my foot's asleep; and things must be pretty bad when you go to sleep at the wrong ent."

## Another Examination Test.

A recent number of the New York Evening Post gives an account of a test made recently by the Cleveland, Ohio, educational commissioners to determine whether the criticism was just that pupits who had finished the grammar school were "neither quick nor accurate in simple arithmetical computations." (One should add, of course, that in the United States a grammar school is preparatory to the ligh school). Since the result is rather striking, the extract is here presented, giving the paper and some statistics as to the examinations:

Add:
1234567
8910
23456
789101
234
56789
210978
3456
78123
432987
65432

| Subtract : |  |
| :---: | ---: |
|  | 9832184567 <br> 3219383574 |
|  |  |
| Multiply : |  |
|  | 38798640209 <br> 46039 |

Divide:
394) $26544332($
" What is 25 per cent. of $\$ 28$ ?
"What is 50 per cent. of $8-9$ ?
"What is $331-3$ per cent. of or 5 ?
" A merchant had 300 barrels of flour, of which he sold 25 per cent. at one time and 33 1-3 per cent. of the remainder at another time. How many barrels had he left?"

This examination is casy, and absolutely free from "catch" questions. Each pupil was given all the time he wanted, but was asked to hand in, on a separate sheet, each problem, as soon as he " felt sure that he had the correct answer."

Let us look at the results. One liundred and ninety-three pupils were tested, representing five schools. In the addition, the time was from one to nine minutes, eighty-six answers were right and one hundred and four wrong; in subtraction, one to three minutes, one hundred and seventy-one right and twenty wrong; in multiplication, one to seventeen minutes, twenty-three right. one hundred and sixtyeight wrong; in division, two to ten minutes, one hundred and seven right, sixty-two wrong; in percentage, one to nine minutes, one lundred and thirty right, sixty-two wrong. Of the sixty-two pupils who made errors, five gave three wrong answers, and fifty-five one wrong.

We believe also that the cighth grade in Clevelamt is no exception. Riut any board of education which is confident that its own system is more efficient can
easily apply this identical test. We should be interested to learn the results in schools in this vicinity.

The written examination in spelling was almost as illuminating as that in arithmetic. The words were pronounced " by the regular teacher and in the usual form," so as to prevent embarrassment or confusion. The list is as follows:

| drowsy | elegant | sieve |
| :--- | :--- | :--- |
| peninsula | tongue | guardian |
| excelled | orange | convalesce |
| diligence | Delaware. | hazel |
| measles | cholera | blamable |
| stirred | civilize | barbarous |
| alliance | anxiety | marvel |
| opponent | Wednesday | obliged |
| surviving | veteran | financial |
| worthy | military | navigator |
| annoyance | increased | business |
| ratio | chargeable | telegraph |
| dimmer | possess | collision |
| wrangle | imagine | seditious |
| opposed | patriotic | balance |
| control | abandon | ally |
| conceal | riddle |  |

One hundred and forty-four eighth-grade pupils from four schools were chosen to compete. The poorest paper contained thirty-six misspelled words out of a total of fifty. The only paper without an error was returned by a girl whose name should be recorded in the Hall of lame, Ione Diggs. The whole number of misspelled words was 1,887 , an average of more than thirteen for each pupil.

## Is Grammar of Use.

The subject in whicl the grammar scliool, socalled, contravenes most sharply the law of the order of learning is, perhaps, grammar. For grammar, being the analytic and theoretical study of language, does not belong in the grammar sclool at all. The scientific classification of phenomena cannot commence until the phenomena have been assembled and made familiar. To this law of learning language is no exception. The language study proper to the grammar sclool is observation and acquaintance, that is, more particularly, practice in reading, speaking, composing. Nor for this is the study of grammar necessary: What is necessary is a very large amount of practice; much reading, much speaking, much composing. The only use of grammar here is a negative one, nanely, to correct mistakes. And for this negative purpose the only person in the grammar seloot who need know grammar is the teacher. The positive, scientific study of grammar must be reserved for the high school.W. G. Parsons, in the April Allantic.

## Lines in Season.

To be prepared for war is one of the most effectual means of preserving peace.-George Washington.
Nothing except a battle lost can be half so melancholy as a battle won.-Duke of Wellington.

- He who did well in war, just earns the right To begin doing well in peace.-Robert Browning.
Truth is its justice's handmaid, freedom is its child, peace is its companion, safety walks in its steps, victory follows in its train; it is the brightest emanation from the gospel; it is the attribute of God.-Sydney Smith.
Let nothing foul to either eye or ear reach those doors within which dwells a boy.-Juvenal.
It is better to keep children to their duty by a sense of honor and by kindness than by fear.-Terence.
I do love my country's good with a respect more tender, more holy and profound than mine own life.-Shakespeare.

Our father's God! from out whose hand
The, centuries fall like grains of sand,
We meet to-day, united, free,
And loyal to our land and Thee,
To thank Thee for the era done,
And trust Thee for the opening one.
-Whittier.
From shore to shore,
Somewhere the birds ate singing cvermore.
-Longfellorv.
"Whoever plants a mulberry tree in his garden sends a public invitation throngh birdland for its people to come and live with him."

The little people that live in the air
Are not for my luman hands to wrong. - Alice Carey.

Does the meadow lark complain as he swims liigh and dry Through the waves of the wind and the blue of the sky? Does the quail sit up and whistle in a disappointed way, Or hang his liead in silence and sorrow all the day?

> Stars creep

Timidly forth, and Venus with her crest Of diamond splendor hovers, loveliest,
As vestal guardian of the violet deep.
-Nathan Haskell Doíe.
No longer forward or behind
I look in hope or fear;
But grateful take the Good I find, The best of Now and Here.
-Selected.
Our lives ate songs; God writes the words,
And we set them to music at pleasure;
And the song grows glad or sweet or sad,
As we choose to fashion the measure.
We must write the music, whatever the song,
Whatever its rlyme or metre;
And if it is sad, we can make it glad;
Or sweet, we can make it swecter.
-Matthez Arnold.

Be just and fear not; let all the ends thou aimest at, be thy country's, thy God's and truth's.-Shakespeare.

A thousand voiees whisper it is spring;
Shy flowers start up to greet me on the way,
And homing birds preen their swift wings and sing
The praises of the friendly, lengthening day.
The buds whose breath the glad wind hither bears,
Whose tender secret the young May shall find,
Seem all for me-for me the softer airs,
The gentle warmth, wherewith the day is kind.

$$
-S e l .
$$

## The Wild Doves of Saint Francis.

(This legend was originally given in an Italian book Called"The Little Flowers of St. Francis.").
" The Little Flowers of St. Francis."
A Tuscan peasant youth he saw, who bore Tethered and bound a swarm of young wild doves, Poor pris'ners who were doomed to sale and death.
St. Francis, who loved all the things on earth,
All gentle creatures that have breath and life,
Felt in his heart a deep compassion born,
And looked at them with eyes of tender ruth.
"O good young man," he cried, "I pray that you Will give to me these poor and harmless birdsSweet emblems they of pure and faithful soulsSo they may never fall in ruthless hands That quench such lives in eruelty and blood." The youth had suared the birds within the woods, Was taking them to market, where their doom He knew was slaughter-sudden, cruel death; Nor had one thought of pity moved his mind, And yet, when gentle Francis made his plea It found an answer in the young man's heart; For use may blunt and thoughtless custom dim The mind to deeds of needless pain and death, Yet in each soul there is a secret cell Whose echo answers to the voice of truth. So the young man gave the wild doves to the saint, And wondered what the holy man would do With these poor captives from the woods and trees. St. Francis took them to his loving heart, And on his breast they nestled safe and warm.
"Dear little sisters," said the holy man,
"Why did you let them take your liberty?
Why place yourselves in peril of your lives?
But you are safe from every danger now,
And I will care for you and build your nests
Where you may safely rear your little brood, And live your lives as God would have you do, Who is the Father of all living things."
The wild doves distened to his tender words; And in his eyes they saw affeetion beam, And in his voice they heard their Father's voice. So the wild birds were tamed by love alone, And dwelt with Francis in his convent home, And there he lotilt the:n nests that they might live Their free and happy lives without annoy:
-William E. A. Aron.-Abridged.

## Springtime Studies.

In the early spring days when the leaves come back to the trees and the birds return from the South, what can be done to bring into the schoolroom some of the new life and freshness of nature's resurrection. Many children in our city schools have little or no opportunity for observing the beauties of nature unless presented with suggestive examples by the progressive teacher. Nothing will develop thought more rapidly than the opportunity to observe the growth of a plant, the unfolding of the fern leaf, or some similar phenomenon, and thought power will lead to thought expression. The stimulation of the rasthetic sentiments will surely help to make each child happier, his view of life broader and more significant; his observation more accurate, his entire range of thought keener and more elevated.

Peas, beans or other seeds, planted in the schoolroom, will be the best method of showing the growth of plants and the value or needs of the various parts. Full directions in reference to this can be found in "Outlines in Nature Study and History." If some seeds are planted in moist sawdust they can be pulled up at intervals to show the successive stages of growth. Have each child make drawings at specified times to illustrate the continuity of growth. In order to enlarge the scope of the lesson use a selection that presents the same thoughts in poetic form. By combining these correlated topics, the subject will be flooded with a new light and an appreciation of good literature can he initiated. The following selection is simple and intelligible, and, thercfore, well adapted to the purpose:

> "In the heart of a seed Buried deep, so decp, A dear little plant Lay fast asleep.
> "'Wake!' said the sunshine
> 'And creep to the light',
> 'Wake!" said the voice Of the raindrops bright.
> "The little plant heard And it rose to see
> What the wonderful outside World might be."

Use the selection also as the basis of language lessons. The olservation of plant life with all its necessities will assist in making real the thonshot, contained in the poem. A booklet made of draw-
ings illustrating the growth of the plant from the seed, with the poem written on the cover, will be a valuable and seasonable accompaniment to this series of lessons.

Other appropriate lessons can be taken in comnection with branches of the pussy-willow, or apple, peach, or cherry blossoms. If these be brought into the school-rom and placed in water, as the blossoms mfold, they will be a delight to the children and they will also afford an opportunity for observation that many of the pupils will not have elsewhere. Calendars can be made and decorated with sprays of the buds and blossoms.

Bud life and habits, the annual migration in the autumn and returning in the spring, the connection of this with the food supply, will furnish much interesting material. The blue-bird and robin, whose welcome notes announce the approach of spring. should receive special consideration. If a bird's nest can be procured and combined with the branch of apple-blossoms, there will be obtained excellent material for drawing and language lessons in connection with the following poem:
> "Two little rohins made a nest 'Twas in the warm spring weather; They built it out of sticks and straws, And little lints of feather.
> "It was upon an apple bough With blossoms all around it, Sn meatly wove and fitted in That no one cuer found it."

The drawing may also be used to decorate the cover of a booklet, within which is written the poen, reproduced by the pupils in their own words.

These are many other suitable poetic selections that will be most valuable in these lessons which combine language and draving in a form that will inspire in the child a desire to scek and to know more of the life of the great outside world,-
"The world's so full of a number of things
That I'm sure we should all be as happy as kings."
-The Teacher.


#### Abstract

A Secret. (Recitation for three tiny girls with gestures). 1 know of a cradle, so wee and so bhere, Where a baby is slecping this morning.- do you?

I think he is dreaming the dearest of thingsOf songs and of sumshine, of thay bown wings. I'tl tell you a secret,-don't tell where you heard,'the cradle's an egg,-and the bolly's a bird!


- Sclectca.


## Canada's Size and Population.

Canada contains nearly one-third of the area of the whole British Empire.

Its population in , 1867 was $3,500,000$; in I901, $5,371,315$; now it is estimated at over $6,000,000$.

Canada's population west of Lake Superior fifty years ago was 8,000 ; now it is more than threequarters of a million.

Canada began the twentieth century with about the same number of people as the United States began the nineteenth century.
Canada las enough territory to give each inhabitant nearly 400 acres.

The Maritime provinces are nearly as large as England and Wales.

Canada has more than forty nationalities represented in her population, but she has 87 per cent of Canadian born people and 8 per cent are British born, making 95 per cent of British subjects.

One out of every three and one-half of the population is of French descent.

British Columbia is the largest province and the richest in minerals.

Canada's centre of population is near Ottawa.
Canada is thirty times as large as the United Kingdom of Great Britain and Ireland.
England's population is 558 to the square mile; Canada's little more than .5 .
There are 132,101 more males than females in Canada.

Canada is adding to its poptlation every year a number equal to the population of Toronto.

Canada has more than one-half of the white population of all Britain's colonies.

Fifty-five per cent of Canada's foreign born population, 193,617, are naturalized citizens.

Canada's poputation west of Lake Superior is 75 per cent British and Canadian born; 25 per cent foreign born.
Ouebec Province has 290,000 of British and 1.322,II5 of Firench descent.-Sclected.

## Guess the Name of the Boy.

The boy colored light jellow red. (dickie).
The loy that's the beak of a crow.
The boy that's a sailor, afloat or ashore,
The boy that's a light, loving blow.
The boy that's a notch in the blade of a kinife,
The boy that's a jork of the head,
The boy that's a wooden tub, small at the top,
The boy eolored light yellow red.-Silicted.

## The Trees' Rebellion.

(Recitation for a little girl.)
Dame Nature said to her children the trees,
In the days when the earth was new,
"'Tis time you were putting your green leaves on, Take them out of your trunks, dears, do.
"The sky is a soft and beautiful blue, The snow went away, long ago,
And the grass some time since popped up its head, The crocuses are all ablow.
"Now hurry and get yourselves dressed, my dears, All ready for summer weather."
But the trees tossed their heads from side to side, And grumbled out all together:
"We really would like to alter our dress, We are quite tired of wearing green; Each year our new suits are just like our old, Can we not lave a change between?"

Dame Nature said to her children the trees, "I'm astorished, I must confess,
To hear you are tired of your robe of green; I think it's a beautiful dress.
"But wear it always in summer you shall, (I've said it and will be obeyed).
However, I'll see ere the winter comes, If some little ehange can be made.
"Your uncle John Frost connes to visit me_ From his home in the polar seas, And I'll ask him to bring for each of you A dress any colour you please."

So every year you may see for yourself, That whenever Jack Frost comes here,
The trees are no longer dressed all in green, But in other colours appear.
-Lizzie Wells, Toronto.

## Our Little Brothers of the Fields.

O brothers of the tongue that speaks, the hand that works such other good, the brain that thinks so kindly for those of your own species, will you not hear and heed the plaint in these wild voices that reach you even at your windows? Will you not lave mercy on those harmless ones that, after centuries of persecution, know and think of you only with aversion and terror? Hang up the gun, burn the whip, put down the sling, the bow, the trap, the stone, and bid them live. Let their juyous woices greet the sun again, as in the days before they learned the fear of men. Take their drooping carcasses out of your hat. my lady, and set an example such as a gentle, well-bred woman should give to her ignorant sisters. Be ministers and friends, not persecutors and enemies. Shoot at targets all yon please. Pumish the evil in the luman race, if you will be stern. lint spare, for their sake, yet more for your own sake, our little brothers of the fields.-Charles 11. Skinner.-Allantic Monthly.

## Problems in Arithmetic-Grade VIlI.

G. K. Butler, M. A.

1: A man cani spend $\$ 5$ on papering a room 18 feet long, 15 feet wide and 12 feet high. The room has two doors 3 feet by 7 feet, and two windows 3 feet by 6 feet. The cost of putting on the paper is $\$ 3$, how much can he pay for a roll of 8 yards, 18 inches wide?
2. The cost of carpeting the same room with carpet 27 inches wide at $\$ 2.50$ a yard is what?
3. Find cost of one floor on the same room $3 / 4$ inch thick at $\$ 25$ a m.
4. A cylinder is 20 inches high and holds io gallons; find its basal diameter.
5. Find the procceds of a note of $\$ 350$, dated finne 5th, at 3 months, bearing 5 par cent. interest, and discounted June 27 th at 7 per cent.
6. A book is sold at a price which gives a gain of 20 per cent. and a discount of 10 per cent. on the marked price of $\$ 2$ : find the cost.
7. Oranges bought at $\$ 2.50$ a hundred are sold at the rate of 3 for to cents; find gain per cent.
8. A horse which cost $\$ 200$ is sold to A at a gain of 40 per cent.;A, after he is injured, sells him to B at a loss of 30 per cent.; find A's loss in dollars.
9. What principal will produce $\$ 67.50$ interest in 3 years at 3 per cent?
10. If 600 liters sell for $\$ 120$ at a gain of 25 per cent., find gain (in dollars and cents) on 500 gallons.
11. An agent receives $\$ 4292.50$ to buy flour on : per cent. commission. If flour costs $\$ 4.25$ a barrel, find the number of barrels he can buy.
12. The base of a triangle is 40 rods, the height is 60 yards; find the area in ac. sq. rds., sq. yds., sq. ft., sq. in.
13. Reduce 6 fur., 14 rds., 3 yds.. 2 ft .8 in, to the fraction of a mile.

Answers. (1) Number of rolls $195^{-6}$, or 20 cost 60 cents. (2) $\$ 100$. (3) $\$ 6.75$. (4) $13.28+$ inches. (5) $\$ 354.55-\$ 4.96=\$ 349.59$. (6) $\$$ r.50. (7) $33^{1-3}$ per cent. (8) $\$ 84$. (9) $\$ 750$. (Io) $\$ 90.86$. (11) i,000 barrels. (i2) I ac. 58 sq, ids. 4 sq. yds. 4 sq. feet 72 sq. inches. ( 13 ) 3 號

What bosom beats not in his country's canse?-P'ope

> I am glad to think

I am not bound to make the world go right,
But only to discover and to do
Whh checrfill heart the work that God appoints. -Jean Ingeiozu.

## "All Thy Work Praise Thee, Oh Lord." <br> Green Things.-

We all green things, we blossoms bright or dim, Trees, bushes, brushwood, corn, and grasses slim, We lift our many-favored lands to Him .

## Medicinal Herbs.-

I bring refreshment,-
I bring ease and calm,-
I lavish strength and healing,-
I am balm,-
We work His pitiful will and chant our psalm.

## Birds.-

Winged Angels of this visible world, we fly To sing God's praises in the lofty sky;
We scale the height to praise our Lord most High.

## Beasts and Cattle.-

We forest beasts,-we beasts of hill or cave,-
We border-loving creatures of the wave-
We praise our King with voices deep and grave.

## Small Animals.

God forms us weak and small, but pours out all We need, and notes us while we stand or fall; Wherefore we praise Him, weak and safe and small.

## All Men.-

All creatures sing around us, and we sing;
We bring our own selves as our offering,
Our very selves we render to our King.

## Little Children.-

He maketh me,-

> And me,-
> And me.-
> To be

His blessed little ones around His knee.
Who praises Him by mere love confidingly.

## All.-

> Let everything that hath or hath not breath,
> Let days and endless time, let life and death,Praise God, praise God, praise God, His creature saith.
> -Christina Rossetti.

## Five Little White Heads.

Five little white-heads peeped out of the mold, When the dew was damp and the night was cold : And they crowded their way through the soil with pride: "Hurrah! We are going to be mushrooms!" they cried. But the sun carme up, and the sun shone down, And the little white-heads were withered and brown: Long were their faces, their pride had a fallThey were nothing but toadstools, after all.

## Keep Your Sons at Home.

Women of Canada! Do you want your sons to grow up proud of their parents' choice of a country; proud of a country in which to live and work and have their home themselves? Do you want them, as soon as they have finished their schooling or their university course, to look around for the career most in keeping with the particular bent of mind which you and Fate have given them? Do you want this career to be aloug some line with which you feel yourself in sympathy? Do you at least wish that it shall be speut in Canada and not in some foreign country away from every tie of home? Do you not long. with every fibre of your being, for the happening of some circumstance which shall place beyond all peradventure your son's choice of a life-work right here in Canada?

We know you do. Then build up Canadian industries; support Canadian schools and universities: choose Canadian enterprises in which to invest money; give Canadian labour the first choice; do everything humanly possible to create a pride in our fair Dominion-these are what we contend are the bounden duties of all Canadians. "Do these things and we create a great country. Create a great country of noble ideals and diversified industries, and no Canadian woman's son will need to go to the United States to find employment, or the widest scope for the best talent that in him lies.

And your daughters! You know that as the gray hairs make their appearance (and even Canadian women do gradually grow old!) you will not like it if you look around and find yourself alone, with one girl in California and another perhaps in Maine. You will think things all awry if there are not little grand-children elambering up your knee. You will think hard thoughts of your countrymen for not having devised means for keeping the girls nearer home. Yet, if the boys leave for another country to find the careers denied them in their own, what are the girls to do? The boys-ought they not to remember whom they have left behind? The girls -are they to become old maids?

Canadian women! We remind you of these things; but we know you can recognize them for yourselves. Your whole lives and loves are intertwined with the destiny of your native country. You want to see Canada grow mighty and populous, not only because you love her for herself. but because her prosperity is the link which binds your sons and daughters to the old lome spot for all time to come.-Canada First, Woman's Department,

One King, One Flag, One Fleet.
One Brotherhood is ours, one King, One Land we call our Home,
One Flag to British realms we bring To wave where'er we roam.

Come, sons of Britain, let us meet, Our brethren o'er the seas to grect, Come, sons of Britain, let us mect, Our brethren o'er the seas to greet.
One Fleet shall make our Union strong; Our sons shall not be slaves,
In distant lands, bursts forth the song,
"Britannia rules the waves."
Undaunted we have faced the foe, As one great nation known;
In war or peace, in weal or woe, We'll rally round the throne.

For flashing swords are not our sign: United, strong and free,
We shall for peaceful arts combine, And peaceful homes shall see.

The weak to raise, the wrong to right Be Britain's great behest.
And mutual heip shall put to fight, Each petty, envious guest.
Our message to the world is Peace: Whilst Commerce spreads our fame.
Nay Truth and Honour never cease To crown our British name.
God bless our King; now join all hands, And with a mighty cheer,
Resounding through Imperial Lands, Will draw each other near.

Myles B. ${ }^{`}$ Foster.

## Guess the Name of the Bird.

Guess the name of the bird that is woven in looms, (duck).
The bird that is coined out of goid,
The bird that is flown at the end of a string,
The bird that is useless when cold.
The bird that is wise and can see in the dark,
The bird that is fastened with spikes,
The bird that is honored on Thanksgiving Day, The bird that the President likes.
"Is there a son of generous England here?
Or fervid Erin? -he with us shall join, To pray that in eternal union dear
The rose, the shamrock and the thistle twine!
"Types of a race who shall th' invader scorn, As rocks resist the billows round their shore; Types of a race who shall to time unborn Their country leave unconquered as of yore!" -Thomas Campbell.

## Victoria the Good.

Queen-Victoria was one of the best rulers who ever lived. She had a very kind heart, and was always glad to do what she conld for the good uf her people. She often gave sums of money to those who were very poor, and she would write kind letters to those who were sick or in trouble.
One of her letters was written to Miss Nightingale during the Crimean War. In it she says: " I wish Miss Nightingale and the ladies would tell the poor noble wounded and sick men that no one feels more for their sufferings than their Qucen. Day and night she thinks of her beloved troops."

Another of these letters was sent to some poor women who had lost their husbands in a dreadful accident in a coal-pit in the north of England. It told them how the heart of the good Queen was sad at their great loss, and the letter helped them to bear that loss with braver hearts.
Queen Victoria had many sorrows of her own, the greatest of which was the loss of her good husband, the Prince Consort. who died after twentyone years of married life. The whole nation wept with the widowed Queen.
Even in her great sorrow the Queen did not forget the sorrow of others. Not long after the death of Prince Albert she went to her castle in Scotland. One of the women of the village near the castle had also lost her husband, and the Queen went at once to comfort her. She often paid visits to the poor people about the castle and took many dainty things to the sick. In one cottage the Qucen once found an old sick woman left quite alone. The rest of the family had gone out, the woman said, to see the Qucen. "Tcll them," said the visitor, after talking kindly for some time to the poor wonan who did not know her, "that while they have been to see the Queen, the Qucen has been to see you."

The planets in the western sky in early May evenings present ant interesting sight. Nearest the lorizon is Venus. higher up is Jupiter, while 'eetween them is Mars. They are all moving eastwar:l, but Ventus goes fastest, and overtakes Mars on the 6th, forming a remarkable conjunction with that planet, the two baing so near together that they can scarcely be separated by the maked eye. As this happens at nine o'clock in the morning we cann,t observe it, but on the preceding and following eworings their apparent distance apart will be less than half the monn's diameter. Vemns overtakes Jupiler on the ith, and Mars overtakes him on the i8th.

## A Canadian Wheat Field.

We have taken the liberty to ehange the title of this selection from "Dacotah" to "Canadian,"
Like liquid gold the wheat field lies,
A marvel of yellow and russet and green,
That ripples and runs. that floats and flies,
With the subtle sladows, the change, the sheen,
That play in the golden hair of a girl, A ripple of amber-a flare
Of light sweeping after-a eurl
In the hollows like swirling feet Of fairy waltzers, the colors run To the western sun
Through the deeps of the ripening wheat.
Broad as the Heckless, soaring sky,
Mysterious, fair as the moon-led sca,
The vast plane flumes on the dazaled eye
Under the fierce sum's alehemy.
The slow hawk stoops
To his prey in the deeps;
The sunflower droops
T's the lazy wave; the wind sleeps.
Then all in dazzling links and loops, A riot of shadow and shine, A glory of olive and amber and wine,
Fo the westering sun the eolors rm Through the deeps of the ripening wheat.
O glorious land! My Western land, Outspread beneath the setting sun!
Once more amid your swells I stand,
And cross your sod lands dry and dun.
I hear the jocund calls of men
Who sweep amid the ripened grain
With swift, stern reapers, once again,
The evening splendor floods the plain.
The cricket's chime
Makes panseless thyme..
And towards the sun
The splendid colors ramp and run
liefore the winds feet
In the wheat. -Hunlin Gorland.

## The Sculptor Boy.

Chisel in hand stood a sculptor boy, With his mardle block before him; Ahd his face lit up with at smile of joy, As an ahgel dream passed o'er him. 11. cerved it then on the yielding stome, With many a shatp incision; With heaven's own light the sculptor shane, lle had caught that angel vision.

Sculptors of life are we, as we stand With our souls, mearved, before us, Waiting the hour when at Gol's command Our life dreatu shall pass d'er us.
If we earve it, then, on the yiclding stone. With many a sharp incision.
It's heavenly beaty shall be our own,
Our lives that angel vision. -Bishop Dounc,

## Five Evidences of an Education.

These five characteristics, then, I offer as evidence of an education: Correctness and precision in the use of the mother-tongue; refined and gentle manners, which are the expression of fixed habits of thought and action; the power and habit of reflection; the power of growth and efficiency, and the power to do. On this plane the physicist may meet with the philologian and the naturalist with the philosopher, and each recognize the fact that his fellow is an educated man, though the range of their information is widely different, and the centres of their highest interests are far apart. They are knit together in a brotherhood by the close tie of those traits which have sprung out of the reaction of their minds and wills upon that which has fed them and brought them strength. Without these traits men are not truly educated, and their erudition, however vast, is of no avail; it furnishes a museum, not a developed human being. It is these habits, of necessity made by ourselves alone, begun in the days of school and college, and strengthened with maturer years and broader experience, that serve to show to ourselves and to others that we have discovered the secret of gaining an education.-Nicholas Murray Butler.

## The Dominion Cabinet.

Prime Minister-The Right Hon. Sir Wilfred Laurier.

Minister of Trade and Commerce - Hon, Sir Richard Cartwright.

Secretary of State-Hon. Richard William Scott.
Minister of Justice-Hon. C. Fitzpatrick.
Minister of Marine and Fisheries-Hon. L. P. Brodeur.

Minister of Militia and Defence-Hon. Sir Frederick William Borden.

Postmaster-General-IIon. A. IB, Aylesword.
Minister of Agriculture-Hon, Sydney A. Fisher.
Minister of I'ublic Works-Hon'. Charles S. Hyman.

Minister of Finance-Hon. Wm. Stevens Fielding.

Minister of Railways and Canals-Hon. Henry R. Emmerson.

Minister of Interior and Superintendent-General of Indian Affairs-Hon. Frank Oliver.

Minister of Customs-Hon. Wm. Paterson.
Minister of Inland Revenues-Hon, W. Templeman.

## The Voice of the Grass.

Here I come creeping everywhere;
By the dusty roadside,
On the sunny hillside,
Close by the noisy brook,
In every shady nook,
I come creeping, creeping everywhere.
Here I come creeping, creeping everywhere;
You cannot see nic coming,
Nor hear my low, sweet humming;
For in the starry night,
And the glad morning light,
I come quietly creeping everywhere.
Herc 1 come creeping, creeping everywhere;
My humble song of praise
Most joyfully I'll raise
To Hin at whose command
I beautify the land,
Creeping, silently creeping everywhere.
-Saral Roberts.

## Boys Wanted.

Charles G. Irish, who addressed a meeting of 300 night school pupils in Utica, N. Y., March 14th, spoke of the time when he and a young friend came to the conclusion that there were too many boys in the world, and went on to tell of seeing a sign in a Utica business establishment's window, "Boys Wanted," and of going in and making inquiries.
"I went in," Mr. Irish said, "and asked the owner of the business how many boys he wanted, what he wanted them for, and what kind he wanted. He said, ' I want boys, and I want a lot of them.' I asked him what kind of boys he wanted, and he said, 'I want live boys.' I did not think this was very strange, as I did not suppose he wanted dead boys. He did not want half live boys or lazy boys. I could understand this very well. 'Then,' he said, ' I want boys who will come carly in the morning and work all day and not have their eyes on the clock all the time. I want boys that will be prompt and that will take hold and learn the business. Such boys as this,' he said, 'are somewhat scarce. Then,' he added, ' we want clean boys, boys who will come witl their hair brushed and their faces and bodies washed. I do not object to patches on their clothes, but I do not want dirty boys. What I really mean by dirt is what comes out of the insides of boysswearing, foul talk, evil thoughts. I want clean boys, and such boys are scarce. I have to hang out that sign very often.'"

## The Banner and the Carpet.

The royal banner bent his head, And to the royal carpet said; "In the Palace at Bagdad Different duties we have had; Different, too, is our reward, Though servants both of one great lord.
"While the storms beat on my head, For a queen's feet you are spread.
I, on marches blown and torn,
Into the jaws of death am bornc.
You are kept from dust and rains, Battles, winds, and rents and stains.
"Yours a calm and happy life;
Mine is full of pain and strife."
Then the royal carpet said:
"You to heaven may lift your head.
I lie here beneath men's feet
A slave to tread on and to beat;
You in battle's storny might,
May lead heroes to the figlit."
-Willam R. Alger.

## The Victoria Cross.

After, the Crimean War, Queen Victoria ordered a new medal to be made. It was to be called the Victoria Cross, and given to any soldier or sailor who had done some very brave deed before the enemy.

The first Victoria Crosses were made from the metal of guns taken from the Russians in the war. In the centre is a crown with a crowned lion above it. From arm to arm of the Cross hangs a scroll bearing the words, "For Valour." The medal is greatly prized, and the soldier or sailor winning it may write the letters V. C. after his name.

The first Victoria Crosses were given by Queen Victoria herself to the men who had won them. She rode to Hyde Park on a white horse (an emblem of victory), wearing a scarlet coat and a plume of feathers. The men were drawn up in a line, and were brought one by one before the Queen. Then she stooped and pinned the medal upon each man's left breast.

Lord Roberts, one of the bravest Pritish generals, won the Cross when he was a young officer scrving with the troops at the time of the Indian mutiny: One day two Sepoys ran off with a British flag. Roberts followed, re-took the flag, killing one Sepoy and putting the other to flight. On the same day he rescued a British soldier from a Scpoy, who was on the point of stabbing him with a bayonet. For these two lorave deeds Roberts was given the Victoria Cross.

In the late Boer War the son of Lord Roberts also won the much-prized medal. He went with a few other brave men to try to save some guns lying in an open place swept by the Boer fire. He was shot down and soon afterwards died, so that he never knew he had won the Victoria Cross.-Adapted from the Britannia History Reader.

## Key for Identifying Sparrows.

Miss Annetta A. Bradley, of Carleton Co., New Brunswick, who recently took the nature-study course at the Macdonald Institute, Guelph, sends us the following key for identifying sparrows by thair most conspicuous markings. It is very simple, and may help some student of birds to make a start :
A. Chestnut Crozen.-

1. Spot on breast . . . . . . . . . . . . . . . .Trec Sparrow.
2. Bill red . . . . . . . . . . . . . . . . . . . .Field Sparrow.
3. Chestnut patch on wing . . . . . . . . Swamp Sparrow.
4. With none of these .. .. .. .. .. . .Chipping Sparrow. A A. Crown not chesturt.-
5. Two white tail feathers .. . . . . . . .Vesper Sparrow.
6. Yellow line over cye . . . . . .. . .Savanna Sparrow.
7. Yellow spot between eye and bill .. .. White Throated Sparrow.
8. Tail red .. . . .. .. .. .. .. .. . . . . . .Fox Sparrow.
9. Breast streaked with spot in centre . . . .Song Sparrow.
10. None of these .. . . . . . . . . . . . . . White Crowned

## Canada, a Rich Country.

" I have travelled four thousand miles over Canadian soil. I have been in the bush and on the prairie, and I have come to the conclusion that Canada is the country of the future ; I know of none greater. Her mincral resources alone make her the richest comntry in the world. This is not mere conjecture; I have arrived at this conclusion after a fair investigation in several parts of the country and a thorougli study of the reports of the Dominion Govermment's Geological Survey Department, and an inspection of the ores to be secn in the collection at Ottawa.
" The resources of Canada are such as to make her a Britain, France, Spain and Russia, all in one. She possesses the iron of Britain, the fruit and salubrious climate of France, the rich minerals of Spain, and wheat ficlds that rival the best in Russia." Mr. Joseph Sutherland, of England, in Montreal IVitness.

I enjoy the Review very much. The art uotes, poetry, etc., in fact everything, is very helpful.E. R. B.

## The Glory of the English Tongue.

Beyond the vague Atlantic deep, Far as the farthest prairies sweep, Where forest-glooms the nerve appal, Where burns the radiant Western fall, Our duty lies on old and young, With filial piety to guard, As on its greenest native sward, The glory of the English tongue.

That ample speech? That subtle speech! Apt for the need of all and each: Strong to endure, yet prompt to bend Wherever human feelings tend. Preserve its force-expand its powers; And through the maze of civic life, In letters, comnerec, even in strife, Forget not, it is yours and ours.

Ricilard, Lord Houghton.-From an Envoy to an American Lady.

## Professor Bell's Kites,

Professor Alexander Graham Bell, the inventor of the Bell telephone. spends his winters in Washington and his summers near Baddeck, in Cape Breton, where he conducts experiments with his tetrahedral kites. The ordinary kite of course requires to be held by a string in order to make it sail, but Prof. Bell has been able to make his kites ascend alone into the air, mounting skyward against the wind without any string, and even turning a circle and rising higher, just like some birds.
"So much significance do I attach to the success already obtained with the frec-soaring kite that I named it the 'Oionos,' as the ancient Greeks styled the 'birds of augur,' whose soarings their prophets watched from 'towers of observation," says Prof. Bell.

One of these kites was tested with a man weighing 165 pounds suspended from it, and it rose until he was thirty fect from the ground, and kept lim there steadily. The kite and its attachments weighed 123 pounds, so the total weight supported by the wind was 288 pounds. These of course are only preliminary studies, and they do not mean that man is ready to fly; they are useful merely in enlarging scientific knowledge of how the wind acts on large surfaces exposed to it.

The Review comes like a faithful friend from the East. Beaver Lake, Alberta.
A. I. W.

I an forwarding my subscription for another year for my old friend the Educational Remiew.
Cape Breton County.
L. B. R.

## The Ferns.

Deep in the woodland glen The earth is white with snow, And by the frezen brock, With cowled heads bending low, As if in prayer devont, With mantles white and straight, Like monks in silent row, The ferns of winter wait!

Deep in the woodland glen The old earth wakes from sleep; The brooks with laugh and song Spring down from steep to steep. A gallant hand of knights, With penmons floating free, Stand where the white monks stood, A brave Green Company!

Every Other Sunday.

The full name of the city of San Francisco, as given by its Spanish founders, was " Mision de los Dolores de Nuestro Padre San Francisco de Asis," -the Mission of the Sorrows of our Father St. Francis of Assisi. The sorrows of its stricken prople have recalled the name.

It has been noted that the earthquake region, a belt that surrounds the earth at about thirty or forty degrees of north latitude, is the region of greatest fertility and most desirable climate, and therefore of the densest population, and the oldest civilization in the Old World. This seems to bs equally trute in the New World, if we add the Central American extension of the earthquake region to the northern belt.

In his book on Nature Teachings F. S. Wood says in speaking of cork: "So buoyant is this substance that a very efficient belt can be made by stringing together 3 or 4 rows of ordinary wine corks and tying them round the neck like a collar. In these circumstances it is simply impossible to sink, and though anyone may collapse from exhaustion, drowning is almost out of the question."
[It might be a safe plan for those who are timid about venturing on the water or who are indifferent swimmers to accustom themselves to the use of such a necklace-to test it well while swinming in water beyond their depth and wear it constantly while boating. Drowning accidents frequently occur because people "lose their heads" on being thrown into water. To become accustomed to the water and know just how to act in it is a great means of safety.-Enirok.]

## True Bravery.

Some one may say, "Did not the men and women have to be braver in the war times than in time of peace?" Let us stamp that as false. What a terrible thing it would be to be brave, if bravery requires of usi to hurt and kill! Is it not brave to try to save life? Thousands of brave men are risking their lives to help men and save us all from harm. Brave doctors and nurses go where deadly disease is, and are not afraid to help save the sick. Brave stadents are trying perilous experiments, so as to find out better knowledge for us all. Brave engineers on thousands of locomotives are not afraid of sudden death if they can save their passengers from harmful accidents. Brave sailors are always facing the sea and the storm. Brave firenen stand ready to die to bring little children safely out of burning buildings. Brave boys every summer risk their lives to save their comrades from drowning. Brave fellows hold in check maddened horses and prewent them from running away with women and children. Brave women risk their own lives daily for the sake of others. Never forget it; it is better to be brave to help men than it is to be brave to harm them-Charles F. Dole.
"I left my dog accidentally at a friend's house yesterlay," said a young girl, as reported in the Philadelphia Erening Bullelin. "My friend tried to get him to run after me, but he would not leave. He plainly beld that I would soon return; that, since I had gone without him, I would come back inevitably for him, and he stuck to the room where I had parted from him, feeling that it was his duty to do so. Finally my friend called me up on the: telephone.
"' Your dog won't go,' she said. •He thinks you will be back, and we can't drive him out.
"' Hold him up to the 'phone,' said I.
"She held him up.
"' Peter,' I said, 'come home, I am waiting at home for yous. Come straight home, Peter, good little dog.'
" Peter wagged his tail, wriggled down and out of my friend's arms and set off homeward like a flash of lightning."

In schools where there may be objections to $g$ neral readings from the Bible or repeating the Lord's prayer, this plan may be adopted for the morning exercises: One morning alternate readings of the Beatitudes (Blessed are the poor in spirit): on another concerning charity (Thouglı I speak with tongues of men and of angels). On another conorming God's care (The Lond is my Shepherd): and so on. Then a favorite hymn may be sung: followed by a memory gem that may be helpful fur the day's work.

## Current Events.

Last month will be remembered for the graat eruption of Vesuvius, and the terrible earthquakes in lormosa and in California. Never since the destruction of Pompeii has the volcano made such havoc in the towns and villages that cluster about its base. The eruption, which had grown alarming in March, continued to increase in violence until the tenth of April, giving the inhabitants of the surrounding regions ample time to flee for safety; yet the people, destitute and helpless, were for the most part unable to get away. Thousands or houses were crushed by the weight of falling ashes, and hundreds of people perished in the ruins.

The earthquake in the southern part of the island of Formosa completed the ruin of one or more towns that were injured by a lesser shock in March. Landslides are said to have completely changed the topography of the country. Hundreds were killed by the disturbance, and thousands left homeless.

More appalling, because nearer than either the Formosan disaster or the volcanic disturbance in Italy, and perhaps more terrible in itself, was the great earthquake in California, by which, at the least estimate, one thousand people were killed, and hundreds of thousands left homeless and destitute. The first shock was felt on the morning of the $18 \mathrm{th}_{1}$ of April. By it, and the resulting fires, more than half of the great and wealtly city of San Francisen has been destroyed. and other cities have suffered severely. Immediate aid was sent from other parts of the United States, and from foreign lands; the Canadian government contributing $\$ 100,000$, the Emperor of Japan a like sum, and the Empress of China $\$ 50,000$, with an additional sum for the Chinese residents of San Francisco.
The final draft of the Moroccan convention was signed by the delegates to the conference on the seventh of April. It is a lengtly document, and hegins with an impressive introdnction, setting forth that the emperors of Germany. Austria and Russia, the kings of Belgitm, Spain, Great Britain, Italy, Portugal and Sweden, the presidents of the United States and France, the sultan of Moroceo and the queen of the Netherlands, desiring that order, peace and prosperity reign in Morocco, have assembled their plenipotentiaries to consider the proposed reforms and to determine on the means to apply them. The chief provisions of the agreement are that France shall police four Morocean ports, Spain two. and France and Spain together two others: while France will have a controlling share in the financi.n management of the country.
The Natal authorities were abont to execute certain Zulus who had been concerned in an anti-tax uprising. when the British govermment interfered to stop the excention. Therenpon the Natal cabinet tesigned. deelaring that they wonld not sulmit to to dictation by the Imperial govermment. Then the latter withlrew the objection, and the exeentions took place. Now a serious uprising of \%ulus is reported, and there is a rumor that a British army
corps is to be sent to South Africa, both of which rumors may prove to be part of the same story.

A special commissioner has been sent to South Africa to devise a scheme of responsible government for the Transvaal.

King Edward has changed the name of Lagos Territory to Southern Nigeria.
Japan has adopted the principle of the government ownership of railways, and its parliament has appropriated money to buy out the private owners. It will take five years or more to carry the plan into effect.

The opening of the new railway from Berber, on the Nile, to the shores of the Red Sea, at the new port called Port Sudan, makes it possible to cover the distance in ten hours, where it required ten days to accomplislı the journey by camel caravan. The new railway provides a new route to India, in case of the closing of the Suez canal.

Perhaps the most important political event of the past month has been the reconciliation between Austria and Hungary. A new Hungarian parliament will be elected on the basis of universal suffrage, and all pending disputes between the Austrian Emperor and his Hungarian subjects will be left to its decision.
President Roosevelt's recent suggestion of the need of a progressive tax on inheritances to check the dangerous accumulation of wealth in the hands of individuals has been received with great astonisiment in the United States, among those who do not know that such a tax has been levied in Great Britain for years. The fact that there are wealthy $m \in n$, any one of whom could re-build San Francisco at his own expense, and still remain rich, is more astounding than the I'resident's suggestion.

At the present rate of progress, it will require forty years to finish the Panama canal if the sea level is adopted. If the lock system is adhered to, the work can be done much sooner, but the results may be less satisfactory.

The report that extensive beds of anthracite have been found near Albany River, is the latest and brightest story of the great mineral wealth of the region south of Hudson Bay. Rich silver mines have been found in the Cobalt region; but if, as it now appears, coal and iron are found near together there, their presence is of more value in the future development of the countrs.

Currie, the discoverer of radium, has ben killed by an accident in the streets of Paris. Since his great discovery, the old idea of the indestructibility of atoms has been abandoned. The atom is now regarded as composed of electrons, which may be given off, with the setting free of cnormous energy: and it is calculated that if the action extends throughout the earth, the emission by every atom of an electron once in a thousand million years would be sufficient to account for the carth's internal heat.

The first Russian parliament will be opened by the Emperor Nicholas in person on the tenth of May. It is expected that he will then announce a general amnesty for political prisoners.

Sugar cane has been successfully cultivated, under government auspices, in the lowlands of Afghanistan.

The Olympic games, in which atheletes from all over the world are to compete, were begun in Greece on St. George's Day. The King and Queen of England were present as guests of the Queen's brother, King George.

The Dominion Parliament has invited King Edward and Qucen Alexandra to visit Canada during the present year. It is hoped that their Majesties will come at the time of the opening of the new bridge across the St. Lawrence at Quebec. Great changes have taken place in His Majesty's North American dominions since he, as Prince of Wales, in 1860, opened the Victoria Bridge at Montreal. Then Canada included but a part of the present provinces of Quebec and Ontario. Now three oceans mark its boundaries, and half the continent is embraced in its area; while its great commercial highway crosses regions then unknown.
We are accustomed to the use of French as well as English in the official life of Canada. It was a novelty, however, for the new lieutenant-governor of Nova Scotia to receive and reply to an address in Gaelic. His appearing in plain clothes at public functions is also another thing in his favor.

A new treaty between Great Britain and China provides for the recognition of China's protectorate over Tibet, and for the opening of certain Tibetan markets to Indian trade. Great Britain will not interfere with the interior affairs of Tibet, unless other powers do so. China will erect telegraph lines and will give preference to the British in the matter of railway concessions; and will pay a large part of the expenses of the British expedition to Lhasa in 1903-4.

## School and College.

F. R. Branscombe, the energetic and popular principal of the Hopewell Cape. N. B., School, and his advanced pupils, gave the Comedy-"Between the Acts" to a large and appreciative audience in the Public Hall on Thursday evening April 12th. The proceeds which amounted to $\$ 35$ will be used to procure maps for the school.

Mr. Cyrus H. Acheson, formerly of Charlotte County, is now Inspector of Schools at Jollannesburg, Africa. In a brief note he states that his family are all well and enjoying African life very much. He says the big questions in Africa just now are Chinese labor and native , unrest.St. Andrece's, N. B., Beacon.
A1 a concert, followed by a social, held in the school house at Carleton, Annapolis County, the sum of $\$ 24.00$ was realized. It is the intention of the teacher Mr. M. C. Foster, who is a Guelph nature student, to use the proceeds for school garden purposes. Nearly a third of an acre of the school premises which is now practically waste land will be ploughed, fertilized and fenced, thereby laying the foundation of a permanent school garden.

The inspectors of schools in New Brunswick, so far as we have been able to learn, have appointed May it as Arbar day.

## THE EDUCATIONAL INSTITUTE OF NEW BRUNSWICK.

The Executive Committee of the Educational Institute met at Fredericton during the Christmas vacation and arranged an interesting programme for the next meeting of the Institute. A number of the leading teachers of the Province will read papers or deliver addresses upon live educational questions. Prof. Jas. W. Robertson, who ilas taken so much interest in public education in this Province, has promised to speak before the Institute or to send a representative from Macdonald College, St. Anne de Bellevue, of which institution he is manager.

## The Institute will meet at Chatham on June 27th.

Dr. Cox, who is chairman of the local comnittee, will see that all necessary arrangements are made for the entertainment of the members of the Institute.

A committee has been appointed to arrange with the authorities of the Intercolonial Railway for the transportation of teachers at the most favorable rates.

## JOHN BRITTAIN, Secretary Institute.

Professor A. M. Scott, of the University of New Brunswick, has been offered the position of superintendent of schools, of Calgary, and it is likely that he will aceept the position. Professor Scott has devoted himself with much energy and ability to his work in the University, where his services will be greatly missed.

Miss Antoinette Forbes has resumed her duties in the Windsor, N. S., Academy, after a three months' leave of absence.

Mr. Charles L. Gesner, principal of the schoof at Canning, N. S., was married on the 11th April to Miss Carrie F. Bent of Belleisle, N. S. The Review extends its cordial congratulations to the happy couple and wishes them many years of happiness.

Dr. Annie M. McLean, of Wolfville, N. S., a graduate of Acadia, who received her degree of doctor of plnilosophy from Chicago University, has been chosen professor of sociology in Adelphi College, Brooklyn, N. Y., and will begin her duties in September.
Miss Muriel Carr, of St. John, N. B., has been offerecl and has accepted the chair of English literature in Rockford College, Illinois, within a short distance of Chicago. Miss Carr recently won the fellowship given by the Women's Educational Association of Boston, a rare distinction, as it is open to all graduates of American colleges. Miss Carr will spend a year, prior to taking up her duties at Rockford, in research work in Early English literature, especially in the comparison of black letter manuseripts, which are kept in various citics in Europe, as Oxford, London, Paris, Berlin and others.

Miss Florence C. Estalırooks, a graduate of the St. Joln, high school in 1900 has made a splendid record in her first year's work at McGill, winning first place in Figlish, Greek, algebra and advanced geometry, besides first rank honours in Latin and general standing, with four prizes including the Coster memorial prize. The young lady and the school from which she graduated are to be congratulated on winning such a distinction as leader of an exceptionally large class at McGill.

Twenty-five Canadian students are enrolled this year at Yale University.
Mr. Will Whitney, recently manual training instructor in the Schools of St. Stephen and Milltown, N. B., is now taking a course in Manual Arts at 'Teachers' College, Columbia University, New York. Mr Whitncy is desirous of giving his service to Canada as soon as an opening occurs.

## Recent Books.

Essays of Elia. (First Series). By Cnarles Lamb. Selected and Edited with Introduction and Notes by George Armstrong Wauchope, Professor of English in South Carolina College. Semi-flexible cloth. XXXVI +302 pages. Portrait. Mailing Price, 45 cents. Ginn \& Company, Boston.
This volume contains thirty of the most popular essays. The introduction by the editor is a fresh, sympathetic, and judicious appreciation of the author's character and work. It is accompanied by a chronological table and a short bibliography. The notes are the most adequate ever presented in an edition of Lamb, and embody the results of ripe scholarship and several years of laborious research. Accompanying the notes on each essay is a set of questions and review topics illustrating the editor's original pedagogical methods of teaching literature.
The Geography of Amprica. By William Hughes, F. R. G. S. Cloth. Pages 129. Price is. 6d. Greurge Philip \& Son, London.
This book gives in very compact form much information on the physical, political and commercial geography of North and South America. It has three maps, and the matter contained in the work, so far as a cursory examination reveals, is up to date.

From the some publisher (Geo. Philip and Son) there come the Model Atlas, price 6 d . entaining 50 maps of the chief countries of the world with relief models, all in colour and the Threepenny Atlas, containing sixteen coloured maps, both very useful for convenient reference.

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Lo It Now and be Ready for Emplre Day,


First Year in French for Beginners. By B. L. Hénín LL. B. (University of Paris). Clotlı. Pages 52. Price 50 cents. D. C. Heath \& Co., Boston.
This book with the exception of a few introductory lessons and the vocabulary is written entircly in French, thus compelling the pupil to think in and speak the language he is learning. The course is practical, gradual and methodical.
「he Medea of Euripides. Edited by Harold Williamson, M. A. Cloth. Pages 159. Price 2s. Blackie \& Son, London.
Two editions of the Medea have been consulted in preparing this volume, -the German edition of Wecklein and the English of Dr. Verralls, the datter an admirable interpretation of the Greek scholar. The introduction, notes, vocabulary and index are well adapted to meet the needs of the scholar. The elearly printed page and the fine illustrations will also be much appreciated by students.

Chemistry Lecture Notes. By G. E. Welch, B. Sc., (London). Cloth. Pages 63. Price 1s. 6d. Blackie \& Son, London.
These notes are such as would be taken during a course of lessons on inorganic chemistry. They are necessarily brief and blank leaves are inserted :llernately with each page of printed notes for drawings and taking of additional notes. The arrangement is very convenient for students and should save valuable time.

Précis Writing. Edited by H. Latter, M. A. Cloth. Pages 214 Price 3s. 6d. Blackie \& Son, London.
This book contains a number of valuable exercises in précis writing for civil service candidates, army classes, and others, mainly in diplomatic correspondence.
Les Deux Sourds. By Jules Moinaux. Edited with notes and vocabulary by I. H. B. Spiers. Cloth. Pages 53. Price 25 cents. D. C. Heath \& Company, Boston.
A brief comedy in sound colloquial French, with a clever plot and lively action.
The Art and Practice of Laundry Work. By Margaret Cuthbert Rankin. Cloth. Pages 191. Price 2s. 6d. Blackie \& Son, London.
This work should prove very useful to young housekeepers and for students and teachers. It has been written to give a correct knowledge of household laundry work and is the outcome of many years of experience and observation.

Complete History Readers. No. VI. Cloth Pages 254. Price is. 6d. Blackie \& Son, London.
This book with carefully selected passages from the history of England and the Empire and attractively illustrated is a very appropriate one for this month. The development of the Empire receives much attention in the volume.

Black's Picture Lessons in English (A. \& C. Black, London), with fifteen full page illustrations in color is a very attractive book for little ones. Price 6d.

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Mr. Andrew Carnegie's rectorial address before the University of St. Andrews on Peace is moteworthy in loehalf of that cause. Published in pamplulet form, price to cents or 100 copies for $\$ 5$, by Ginn \& Company, Boston.

## Recent Magazines.

The May Delineator, has a complete display, pictorial and descriptive, of the latest Spring fashions. Hon. Jnstice David J. Brewer contributes an article on "Woman in the Professions" in which he comments on the significance of the fact that the status of women has changed in the last half century. Alice Brown contributes a fairy tale for the little ones. There are other features to delight young folks, including a chapter in the serial, "Sunlight and Shadow" and pastimes by Lina Beard.
The April Canadian Magazinc, with its excellent coloured cover and its attractive coloured printing is one of the best issues of this publication. Canadian perindicals are showing improvement, as might naturally be expected with the growth of the country and the development of our
mational life. The historical and analytic article on the Grand Trunk Pacific is important, and is rendered attractive by the liberal nese of plotographs of scenes along the proposed line and portraits of the directors.

The April Allantic contains a rich variety of articles upon timely and important topics. Willard G. Parsons contributes a striking paper entitled Making Education Hit the Nark; Charles M. Harger has a picturesque paper on The Lodge, setting forth the place of the lodge in the social and intellectual life of the American pcople. Among the essaye are The Reform in Church Music, by Justine B. Ward, A Plea for the Enclosed Garden, by Susan S. Wainwright, and Tide-Rivers, by Lucy S. Conant. The stories, are uncommonly attractive and entertaining.
By all odds the most striking figure in the new Liberal Ainistry in England is Mr. John Burns "The WorkmanMinister" whose personality and carecr are interestingly described in an article which The Living $A g e^{*}$ for April 14th reprints from The Ninctecuth Contury. Very diverting is the skit of "Ancrican Manners" which The Living Agc for April itthr reprints from Temple Bar.

The April Chautanquan continues the scholarly and interesting series of articics entitled Classical Intluences in Modern Life. W. A. Eltiont contributes a study of the Modern Greck-no elose relation to the Greck of olden times but interesting modern, democratic and enterprising.

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## OMISSION

In the Journal of Education of Nova Scotla October, 1905, page 187, Prescription. for Grade XI.
By the printer's mistake there has been omit ted from the prescriptions for Grade XI in the October JOURNAL OF EdUCATION for 1905, on page 187. the following prescription which is cor rect as publishedio the April edition preceding " PHYSICS. - 11 : As in Gage's Introdiction to Physical Science.
Practical Mathematics should be numbered respectively 12 and 13 .
Education Office,
A. H. MaCKAY Halfax, N. S.. Jan. 27, 'o6. Supt. of Education,

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G. U, HAY,

Editor for Now Brunswick.
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> THE EDUCATIONAL REVIEW,

St. John, N. B.

## No Review will be issued in July.

St. John, N. B., is moving in the matter of establishing vacation play grounds for children.

The Educational Institute of New Brunswick will meet at Chatham, June 27-29. The Educational Association of Nova Scotia will meet at Halifax September 25-27. See particulars of both meetings on another page.
The Summer School of Science holds its 2oth session at North Sydney, July 3-20. Calendars containing all information can be had by addressing the secretary, W. R. Campbell, M. A., Truro. The third session of the French Holiday Courses in connection with McGill University will be held at Montreal, July 6-26. The longer courses at Yale and Harvard begin about the same time. The advertising pages of the Review give full information.

Professor A. Melville Scott, Ph. D., who has just retired from the University of New Brunswick to accept the superintendency of schools at Calgary, was presented recently by the Y. M. C. A., Fredericton, with a gold watch fob. Dr. Scott's active interest in all work that appeals to the citizen and university professor made him a valued member of the community and his loss will be much felt.

The Educational features of the Exhibition at St. John in September are fully set forth on another page. It is some time since the work of the schools of New Brunswick was adequately represented, and it is to be hoped that teachers, pupils and school officers will be cager to avail themselves of the opportunity that such friendly competition affords. The natural history exhibit will be much more complete than any previously furnished, showing the native animals, plants, and economic minerals of the province in an attractive way.

During this month teachers may do much to direct the activities of their scholars during the approaching long summer vacation. The scholars are interested in things out-of-doors; plan out something interesting that they can do in that line, which shall help them in next year's nature-work, and at the same time be recreation for them,-for recreation is not idleness. In this connection teachers will find many suggestions in Principal Soloan's article on "Summer Holiday Activities," published in last year's October number of the Review.

Would it not be a good plan to name some of our schools after men who have conferred honour upon the cities and provinces throughout Canada, rather than to have such schools named after the streets in which they stand. There are many men for example in the Maritine Provinces whose names are remembered in educational or literary circles, or in the comucils of the country. It might be more fitting for Halifax, for instance, to have its Howe or Hatiburtons school, instead of the Morris or Albro St. school ; St. Joln could honour the names of Sir Leonard Tilley, King, John Boyd in the Winter strect or Union street schools; Fredericton conld revere the names of Sir Howard Douglas, or Sir
L. A. Wilmot, or Theodore Rand in its York street or Charlotte street schools. Now that we have exhausted the names of kings and queens and gov-ernor-generals, would it not be well to honour local celebrities in naming our city and town schools?

## Canadian Nationality.

The Cry of Labor and Other Essays. By W. Frank Hatheway, St. John, N. B. Cloth. Pages 230. Wm. Briggs, Toronto.
Canadian readers are glad to welcome in book form an elaboration of the fugitive essays of Mr . W. Frank Hatheway, which for several years past have appoared in the press under a pen-name. Mr. Hatheway is a tireless student, a wide reader, a lover of Nature in all her moods, and thoroughly impressed with the possibilities of Canada. He knows the nations of the old world from personal contact and from books; he has seen all parts of this fair Dominion; on foot and on bicycle he has visited hundreds of hamlets and country sides in New Brunswick and Nova Scotia, talked with the people. sympathized with their moods and respected their convictions, exchanging ideas on every conceivable topic, in every grade of society. Living at times both in city and country, he knows the latter as few know it-its mountains and valleys, its glens and gorges, its lakes and streams. He has seen it in cloud and in sunshine, in winter and in summer, in the vivid green of springtime and the varied hues of autumn,-and he has appreciated its beauties as few are able to do.

So much for the author: now for the book. His aim, he tells us, is "to develop a high national character, so that the word 'Canadian' will mean an educated intelligence that sees both the beautiful and the useful in Nature, that has an abiding faith in the Creator and a decp love and reverence for the land in which we live." Throughout, from his own observation in o:her lands and from his extensive reading, he finds Canadian seenery, Canadian conditions of life superior to those of other lands. and every page of the book appea's to Canadian citizens to feel the responsibility of their citizenship. to take a wholesome pride in it and to cultivate a love for their natural surromulings.

A note of patriotism is struck in the book when the anthor, almost on every page, advises Canadians to know more of their own country, to study its resources, to know its beautiful scenery, the wonderful progress it is making industrially. There should
be an intellectual progress to keep pace with this material progress. But to advance along every line we should "seek our ideals at home."

## Tests of Applied Education.

Prof. F. J. Miller of Chicago University in a recent lecture there, declared that our colleges develop the mind rather than the heart, and said that candidates for degrees should be required to answer such questions as these:
"Has education given you sympathy for all good causes? Has it made you public-spirited, so that you look beyond your own dooryard and take an interest in a clean city? Has it made you a brother to the weak? Have you learned how to make friends and to keep them? Do you know how to be a friend yourself? Have you learned the proper value of money and time? Can you look out on the world and see anything but dollars and cents? Can you be happy alone? Are you good for anything for yourself? Do you see anything to love in a little child? Can you look straight in the eye of an honest man or pure woman? Will a lonely dog follow you? Can you be high-minded and happy in the drudgeries of life? Can you see as much beauty in washing dishes and hoeing corn as in playing golf or the piano? Can you see sunshine in a mud puddle? Can you look up to the sky at night and see beyond the stars."

Education is "something more than a college education ;" broadly, it is "adjustment to life," he said.

## The Ideal Teacher.

Before all other qualifications, however, the teacher's character is the fundamental requisite. That must be above reproach in all things.' Milton's words about the poetic power are specially true in regard to the power to teach. "He who would not be frustrate," said the great poet, "of his hope to write well hereafter in laudable things, must himself be a true poem." He who would not be frustrate of his hope to teach well at any time ought himself to be a lofty exemplar of the virtues he would impress upon his pupils. The teacher who stands before a class for hours every day ought to exert greater influence even than the clergyman who speaks from the pulpit one day in the week, and he ought at least to have an equally lofty character. known and recognized by all men. The teacher who is master of his subject, and who has this nobility of character, needs no help of artifices to assist him in governing his pupils-he has simply to be, and they obey.-Arthur Gilman, in Atlantic Monthly.

# Our Native Trees - XI. 

 By G. U. Hay. The Old Oak Tree Outpost of some primeval wood, More than two hundred years it stood, And watched benignantly the ways Of men in these strange 'atter days. And if the gnarled old tree but knew All those on whom its shace it threw, What a great, various company It sheftered in its memory!It caught the sunbeams as they strayed Among its deafy boughs, and made An oasis in the traveler's way, How many a suxtry summer day! It kept, mayhap, wis courage good, As midway of the towns it stood, A way-mark fie cond measure by, And know his journey's end more nigh.
It gave the chikiren acorn-cups,Such have they where Titania sups,And its brown, fitter nuts it poured To swell their homely, winter hoand. Its boughs were wons to interlace, To make a neignbonly mecting-p'ace. While sometimes lovers' trysts, maybe, It saw, -this silent, friendly tree!

It gave the binds a bame, and we Were happier for their ininstrelsy,No sweeter, though, than its own rune, When west winds were with it in tune.
It gave a sense of calms and joys, Beauty and stienglin in equipoise; A bint of life ourduring ours,
As the russet leaves its showers.
And' then beside our winter fire, We watched the cheerful flame aspire, As its stout heart to ashes mirned, While willingly for us it burned,Still free to serve as when it made A hospitality of shade.
And who of us can hope to be Of sweeter use than this oak-tree? Shade, shelter, dial, meeting-spot, Giver of song, hope, warmth, and thought! -Scleited.

Three species of Oak are said to exist in the Maritime Provinces. of which the red oak (Quercus rubra) is the commonest. It is a rapid grower, and its wood, which weighs 41 lbs to the cubic foot, is less valuable than many others, being softer and so full of sap that it is difficult to remove it by drying. For this reason it makes poor fuel. It is short-lived, in comparison with other oaks, but grows to a large size and has a spreading habit, giving abundance of shade. In a forest of red nak,
which may sometimes be found on slopes facing the sum, there is usually plenty of room for smaller plants, quite different from what one finds in the denser shade of a beech forest. The flowers which appear with the leaves in spring are of two kinds on the same tree (as with other oaks), the staminate flowers (each containing about eight stamens) in catkins and the fertile ones, like tiny little pink knobs,-both growing in terminal or axillary clusters on recent shoots.
The oaks are among the last trecs to put out their leaves in spring and they retain them late in the fall. The leaves of a forest of red oaks, with their rich red and purple colours, are a beautiful sight when the brighter colours of the maples begin to fade. The heart wood of the red oak is reddish in colour, splits easily, shows a beautiful grain, and is much in demand for making furniture. It is used for planking for the decks of vessels, for strong barrel staves, and for bridge posts where there is exposure to water.

The fruit is a large, somewhat bitter acorn, enclosed in a shallow open cup, very abundant. In some districts where there are forests of red oak, swine are fed on the acorns which are known as "mast." The acorns ripen and fall at the end of the second season.

The beawtiful shape and spreading habit of the red oak make it very desirable as an ornamental tree, but it requires plenty of room and sumlight to reach the majestic proportions to which many of these trees attain. The trunk soon becomes lost in the large and numerous branches which spring from it in curves. Most of the limbs are knotty and crooked.

The bur oak (Quercus macrocarpa) is not a common tree in the maritime provinces. The bark of the trunk and branches is an ash gray, darker than that of the white oak. This tree does not here attain the size which distinguishes the red oak, but its trunk is more erect, and its branches less spreading. It is found in deep rich soil in river valleys; grows much more slowly than does the red oak, and is more difficult to transplant.
A variety of the scarlet oak (Quereus coccinea) has been found in at least one place in New Brunswick by Dr. Brittain. It is smaller in size than either of the preceding forms, its foliage is also more deeply cut, shining green in summer and a bri liant searlet in autumn, making it a very desirable tr e for omamental purposes. The young trees are said to be lacking in symmetry, but they make a rapid growth in any light well chained soil.

The short stout trumk of the oak, holding its immiense weight of branches, is an emblem of strength. Its wood has shown this strength. For hundreds of years it was used in building the ships of England's navy. The ancient Britons worshipped the oak, which then grew in great abundance over the southern part of the island of Great Britain.

## Our Mountains and Hilis.

## By Professor L. W. Barley, LL.D.

If our sea-coasts, as shown in previous sketches, have their beauties and their lessons, this is no less true, in both particulars, of our hills and mountains.

True it is that within our limits we have, no, eminences sufficiently exalted to introduce in any great degree the element of grandeur. We have no towering peaks like those of the Alps, the Yungfrau or the Matterhorn; no volcanic cones,' like those of Vesuvius or Etna; no permanently snow clad summits or glacier-filled valleys; no profound cañons, such as trench the Rocky Mountain system in so many ways and places; we have no heights exceeding $2,900 \mathrm{ft}$., which in regions of great mountains would be mere pimples on the side of the loftier ridges; yet no one can stand on the summits of our higher hills, after a more or less arduous climb, without feeling amply repaid for the effort necessary to reach them.
Take for instance Bald Mountain'; at the head of the Nictau branch of the Tolique, the highest, as, with the exception of a few feet, it is certainly the finest eminence in Acadia. As one stands upon its nearly bare summit, and with his eye sweeps the horizon in the effort to identify recognizable points, what a panamora lies spread before him! As far as the eye can see (and this under favorable conditions may be one hundred miles or more-inchuding in one direction the distant hills of Gaspe, and in the other the conspicuous ridge of Mt. Katahdin in Maine) there is apparently an unbroken forest, though columns of smoke rising here and there in the distance, mark where clearings or settlements have taken partial possession. At our feet is Nictor Lake, prettiest of New Brunswick lakes, nestling among hills, but little inferior to that on which we stand, which for unnumbered ages have stood undistinguished by special appellations, and have, through the labors of Prof. Ganong, only recently been named and measured. (See list below). To many, such a view suggests the waves of a
storm-tossed ocean; only, unless a storm be brew-ing-and storms in these highlands come with mnexpected suddenness and violence-there is a quietude which is almost solemn. Surely such scenes widen one's horizon in more senses thán one. They lift the observer to a higher than the ordinaty plane of thought, and, as Ruskin has said, "Nature herself among the mountains seems freer and happier, brighter and purer, than elsewhere."

Let us change now for a moment our point of view and look at old Sagamook (Bald Mt.) from the lake below, as the writer has done more than once by the moonlight of a midsummer night. The accompanying photo will give some idea,


NICTOR LAKE ANO SAGAMOOK MOUNTAIN. but a very imperfect one, of its outline, but only an actual visit to what is undoubtedly the prettiest and most striking bit of scenery to be found in New Brunswick, can convey any adequate idea of the impression it produces, an impression not of beauty only, but also of grandeur, solemnity and mystery,-the latter for the reason that so many thoughts are suggested, which one finds it difficiult or impossible to answer. How long for instance has the mountain been there? How and when was it produced? Does it represent the original hill in its entirety? or is it, like many other mountains, only a fragment of what it once was?

Before attempting to answer these questions, and as paving the way to an answer, let us look for a moment at some other of our prominent hills.
I would next refer, in New Brunswick, to the Squaw's Cap and the Sugar Loaf near Campbellton. Their names suggest their general outlines, which, like some of the effects of sea-sculpture already noticed, illustrate the frequency with which Nature produces risults similar to those of human agency. A view from the summit of the first named eminence with members of the Summer School, Campbellton, 1899, resting near the summit, 2,000 fect above the sea, is given in the accompanying cut. In this case the ocean is distinetly visible in the distance, its surface dotted with white sails, while nearer at hand is the sea of grean which is always, muless forest fires have swept them away, an accompaniment of mountain views, and in the near foreground piles of

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"FEEDING HER BIRDS."


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SQUAW'S CAP MOUNTAIN, NEAR THE SUMMIT.
broken rock fragments, rent by frost and ice from the rocky ledges of which they once formed a part. Here one of our first lessons may be learned. It is that what we commonly sjeak of and are aje to regard as the "everlasting" hills are evidintly sulbject to decay. They are continually losing of their sultstance, and if this process continues indefinitely, the mountain must in time be worn down and disappear. It is the same lesson that we learned on the seashore, the lesson of inevitalle change. Fvery one of our hills tells the same story, and the great piles of angular fragments on their sides. known to geologists as taluscs, become both a proof and a measure of the change. They represent the results of what is known at the "creep" of rocks-movements which, ordinarily slow, but at times angmented by more vigorous slips or slides, are everywhere tending to reduce the heights of the land to the livel of the sea. The accompanying cut shows one among the conspicuons land slides characterizing the bay of Fundy coast in castern St. John county, whil: simi'ar effects are very conspicuous at lilomidon. Another feature of our monntains deserves attention here, for it gives another lesson based on momentain forms. It is this: If we look from some high eminetice over the sea of hifls spread on every side of us, we notice that however distinct the individual hills may be, they all rise to about a common level: in other words they owe their form and individuality mainly to the valleys which separate them. Now these valleys are occupied bey streams. such as the Tobique, which. in the case of the Bald Mountain view already alluded to, may be seen, with its tributaries, winding like silver threads through the forests of green; and the question arises whether the valleys are not due to the streams, and whether, before the latter began their work, there were mo
valleys and therefore no hills, what are now such being all united in a common block. This is the view now generally held as to many mountain regions, and it serves to explain many facts which would otherwise be inexplicable. Sucl flat blocks or plateau, of which there are several in New Brunswick, including the whole of our northern Highiands, are commonly known as penepianes. They suggest, a fact to which we shall return in a lat r chapter, that our rivers may, in some cases at 'east, Le older than the hills. The fact referred to also explains-what is often fotud to be the case in our northern liil's, like those of the Restigouche and Nepisiquit r.gions-that what appears from the valley beios to be a veritable mometain is. as we prove ly ascending it, only the cut end of a ridge, the top of which is flat for many miles. There are inded isolated hills, and some of these, like the Sugar Loaf, already mentioned, or lhald Peak near Riley lirook on the Tolnifuc, are very conspicuons, looking almost like volcanic cones, but even these are probally remmants of plateaus isolated or reduced by water crosion. The idea that mometains in general are wholly the results of upheavals, does not tally with th: facts. A part of their elevation, and possibly a considerable part, may be due to up-

ward bends of the earth's crust, but their prominence, and the details of their outlines are due almost solly to cutting down rather than to thrusting up. Like most geological results they ars due not to sud-
den convulsions, as is so generally thought, but rather to the operation of ordinary agencies operating through long periods of time.

It may be of interest and of service, now. to have a systematic table of the principal clevations in the
maritime provinces. Those of New Brunswick are mainly given upon the authority of Dr. W. F. Ganong, who has done so much towards the correct determination and delineation of the physical features of the Province.

## HEIGHTS OF ACADIAN HILLS.

1.-New Brunswick.

| Name | County | Locality | Eleration | Origin |
| :---: | :---: | :---: | :---: | :---: |
| Sugar Loaf. .... | Restigouche | Near Campbellton | 1000 |  |
| Squaw's Cap.. | do. | do. | 2000 |  |
| Sagamook.. | do. | Nictor Lake, Tobique | 2576 | Sedimentary and Volcanic |
| Gordon. | do. |  | 1569 | do. do. |
| Bailey | do. |  |  | do. do. |
| Carleton | Northumberland | 3 miles S. of Nictor Lake | 2675 | do. do. |
| Big Bald, | do. | Nepisiquit Region | 2310 | do. do. |
| Teneriffe. | do. |  | 2108 2090 | do. do. |
| Moose Mit. | Victoria | $\therefore$ | 1030 | do. do. |
| Bald Head | do. | Near Riley Brook | 1866 | Volcanic |
| Blue Mts. | do. | Tobique Valley | 1724 | do. |
| Bald Mt.... | York | Near Harvey |  | do. |
| Cranberry Hill... |  |  |  |  |
| Magundy Ridge. Howland Ridge. | do. | Near Magaguadavic L. |  | Sedimentary |
| Howland Ridge. |  |  |  | do. |
| Bald Mt.... Douglas Mt. | Kings | Near Long Reach Near Wcldsford | 1462 | Granite |
| Mt. Pleasant | Charlotte |  | 120 | do. |
| Chamcook. | do. | Near St. Andrews | 637 | Sedimentary and Volcanic |
| Eagle |  |  | 854 |  |
| Ben Lomond | St John | Near Loch Lomond | 850 | Volcanic |
| Quaco Hills | do. | South of Sussex, \&c. | 500-1000 | Sedimentary and Volcanic |
| Shepody. | Albert |  | 1050 | Sedimentary |

2.-Nova Scotia.

| Cobectuids. |  |  | 1100 | Sedimentary and Granitic |
| :---: | :---: | :---: | :---: | :---: |
| North Mlst. | Annapolis |  | 400 | Volcanic |
| South Mts. | Annapolis and Digby |  | 1000 | Granite |

Some of the readers of the Review, noticing the term "volcanic" occurring so frequently in comection with the origin of our prominent liills may be somewhat surprised, and be led to ask, do these hills actually represent old and dead zolcanoes? To which I answer no, not in the sense that they were ever "burning mountains" like Vesuvius, or Etra or Stromboli, high cones, with craters at their summits. Some of them may indeed have once had those features, even if they are not recognizable now; but what is meant is that the material constituting the hills termed volcanic, are largely or wholly made up of material similar to that of ordinary volcanocs, and hence of igneous rather than aqueous origin. They show abundantly in many places the fact of their laving been once
melted, not only by their slag-like aspect, but also by the effect which they have determined upon the rocks in contact with them: in other places, as on Grand Manan, and near Israel Cove on Long Island, N. S., they show the same columnar or basaltic structures as seen on the Giant's Canseway in Ireland; at still others, as on Blomidon and the range of the North Mts., they are filled with cavities due to the expansion of steam and other vapors. In many instances, as in the case of the high hills at the head of the Tobique and Nepisiquit rivers, they are simply old volcanic muds or tufas, and beds of this character are there spread over vast areas. In the case of the North Monntains of Nora Scotia, on Digby Neck and in Grand Manan, the molten rock, instead of issuing from one or more isolated
vents, would seem to have come up along an cxtended crack, parallel with the trough of the Bay of Fundy, and doubtless due to the strains determined along its bottom in some former perion of subsidence.

The granite hills so conspictuons in both Provinces, such as the Nerepis Hills, Cobequids and South Mourtains, have also a semi-igneous origin: only here the material composing them probahly originated through the action of heat acting only at great depth, and producing crystallization without fusion.

The relative hardness of igneous and granite rocks accounts for the prominence with which such hills usually rise above the surface.

## On the Present Confusion in the Names of American Plants.

By W. F. Ganong.

In the Review for January rop4, I gave an explanation of the reason for the conclition described by the above title, and stated that the whole subject was to be considered and acted upon by an International Botanical Congress to be held at Vienna in 1905. I wish now to explain briefly the action of the Congress aud its significance for those who use the scientific rames of our native plants.

And first I had better recapitulate the reasons for the confusion, leaving the reader to consult the original article if he wishes fuller information. It is universally agreed among Potanists that each species of plant slaall bear hut one scientific name, which is in Iatin and consists of two words, a genus word and species word; and furthermore all are agreed that the first scientific name given a plant after the introluction of this system by Limaens in 1753, shall ever after be its sole natne. Nowadays. and in recent years this method of giving names is, and has been, universally practiced, and there is no appreciable confusion in the names of recentlynamed plants. But unfortumately, whether through carelessness or accident, it was not closely olserved in earlier times, with the result that a great many names came into wide, or even universal, use which were not the first ones given the respective plants, the earlier ones being overlooked or forgotten. In the past fifteen years, however, as an accompaniment of the greater activity and more critical spirit prevailing among students, many of these older names have been discovered, thus actively raising the question, shall we retain the well-known though fater ones, or shall we abandon them in favor of the
earlier and theoretically correct'ones? 'Yise subject in practic: is vastly more complicated than this simple statement would seem to imply, and upon the various points at issue the Bolanists of this country. have separated into two schools, the Grayan school, (with their ideas expressed in Gray's Manual, and in many subsequent publications, chiefly by the New England botanists), and the Neo-American School, (represented ly Brittons and Brown's Flora and Britton's Manual). Among the many points at issue between the schools, two stand out with especial prominence, and they are these.

First:-when in the progress of knowledge a species has had to be changed from one genus to another, and has lod its species name changed during the process, shall its correct scientific name be that combination of genns and species names which it bears when finally landed in its correct genus, or shall it be the name of the correct genus combined with the earliest specific name ever given to the plant? The Grayan School has held the former, following in practice a so-called Kew Rule, and the Neo-American school the latter.
Second :-a great number of the first mames given to genera became, for reasons which were explained in the original anticle and need not be repeated here. replaced by later-given names which have come into wide or event miversal use. Slatl these later wellestablished names now be set aside in favor of the earlier?

This second question is much more important than the first, considered above, partly becanse these names lrappen to be so numerous, and partly becaus: every change of a genus name changes of course, the name of all the species contained in that genns, no matter how numerous they may be. In this matter the Grayan selool lias been in accord with the leading lootanists of Europe in loolding that such iong-establisled mames should not be changed, and they have followed a certain rule, (called the Berlin Rule), for the regulation of doubtiful cases. The Neo-Anerican sehool, on the other hand, maintains that the older names must all be restored, claiming that only thus can stability in momenclature be finally attained. There are other differences between the schools, but they are less important and more technical. and we shall confine ourselves to these two.

And now, what of the Vienna Congress and its decisions? In my opinion this Congress was as representative, authoritative and competent an assembly of Botanists as could possibly have been brought together; and morenver the carefulness and
publicity of all the preliminary preparations were such as to ensure the greatest fairness and opportunity to all. The matter of momenclature was in charge of a special committec appointed at the Paris Congress in 1900. Long before the meeting of the Congress, this committee invited all Botanists to send in their ideas and suggestions as to nomenclature, and months before the meeting the committee published a large volume in which they gave all these suggestions, together with the rules adopted in earlier congresses and other matter germane to the subject. This volume was sent to all persons who were to take part in the nomenclature discussions of the Congress. The Congress met in June, and there were present more than five hundred Botanists. Of these about one hundred were specialists in classification and momenclature, and took part in the discussions upon the latter subject. They represented, as officially-appointed delegates, all the principal botanical societies and instilutions of the world, and of these delegates sixteen were Americans. The various proposals made by the different schoo!s and individuals were debated through six days. In most cases the important questions were debated and voted upon separately, and even in cases where groups of related questions were voted upon in block, every member had the right to call for separate discussion and vote upon any single matter. I do not see how anything could possibly have been fairer. And the result in the two matters most at issue between the Grayan and Neo-American schools was this. In regard to the Kew Rule, the Congress decided in the main against the Grayan school, though with a reservation in its favor in the case of such names as have had their rank (from variety to species or vice versa) changed in transference. On the other, and more important question, the decision was wholly in favor of the Grayan and against the Neo-American School; for while not adopting the Rerlin Rule as such, the Congress sanctioned as correct a list of familiar and long-established generic mames, including practically all those at issue betwe ne the schools. This action of the Congress is comparable to that of Legislatures, when they legalize by special enactment certain acts, marriages, etc., which are in equity correct though with some flaw in their title. Some of the other decisions of the Congress on minor points also went heavily against the NeoAmerican School, though hardly any other point went against the Grayan School.

So much for the decisions of the Congress. What effect will they probably have upon this troublesome
subject of confused nomenclature? Of course nobody is in any way legally bound to follow the decisions of the Congress, but whether any Botanists who have the good of the Science at heart, and especially any of those who took part in the Congress can honorably ignore its decisions is another question. Of the two American Schools, one at least has left us in no doubt as to its intentions. The leaders of the Grayan School have announced that they will loyally conform to all the decisions of the Congress. The partial abandonment of the Kew Rule will necessitate, they estimate, some fifteen percent of changes in the names of the Sixth edition of Gray's Manual, but the future editions of that Manual, and all the publication from the Gray Herbarium, we are assured, will follow the decisions of the Congress. The leaders of the Nco-American school, so far as I know, have made no amouncement of their intentions, but I camot question that they also, having made a gallant fight for principles in which they believed, will accept the issue in the spirit both of true sportsmen and of public spirited scholars, and will likewise conform their usage to that of the Congress. Thus we may look forward to an end of that confusion in nomenclature which has been not simply an annoyance, but an actual impediment to the further progress of botanical knowledge.

The answer to each of these enigmas is the name of an English Author.

Makes and mends for customers?-Taylor.
Dwellings of civilized countries?-Holmes.
A head-covering? -Hood.
What an oyster heap is likely to be?-Shelley.
A very tall poet?-Longfellow.
More humorous than the former?-Whittier.
A worker in precious metals?-Goldsmith.
Always a pig?-Bacon.
A disagreeable foot affection?-Bunyan.
A domestic servant?-Butler.
A strong exclamation?-Dickens.
A young domestic animal?-Lamb.
An Englishman's favorite sport ?-Hunt.

A young teacher says: I have found the Review well worth the subscription price to the young and inexperienced teacher, keeping him in touch with the work, ideas and methods of his fellow teachers,-F, J. P.

## Corot.

By Miss A. Maclean, New York.
Jean Baptiste Camille Corot (ko-ro) was born in Paris, July 26th, 1796 . Taking the train at Paris, a short run brings one to Sevres and Ville d'Avray. Sevres is on the river, but Ville d'Avray is further back on the ridge. Passing up through the Ville (veel) and descending the other side of the ridge by steps, one comes to a beautiful little lake. Just at the foot of the steps is a fountain, and on the large marble siab is inscribed "Veri diligentia" (search after truth). A large medallion head of Corot is cut in the slab, and bereath it his name.. Opposite the fountain is the old home, where he lived with his sister after their parent's death. Nothing has been changed since his death. It is a picture of ease and comfortquaint, flower-decked, vineclad, trec-shaded. Turning from this, one faces the lake. There are the trees Corot painted, and which one can never fail to recognize-wil. lows, silver-leafed beeches, here and there silver-poplar:s, and, on the further shore, tall Lombardy poplars with ragged rufles of leaves about their dead stems. These were as familiar to Corot as the walls of his studio. Loveliness everywhere. Millet was in full sympathy with his surroundings; Corot with his. Millet's pictures may be called the rugged strophes of toil, Corot's the summer idyls; each are part of life and nature.

Today in the Bas Bréau, in the forest of Fontaineblean, at the very gates of Barbizon, the grand trees speak as they spoke to Rousseat: in the open glades the play of light and shadow lites and witches as it did Diaz; still the gorges of Franchard offer the backgrounds for scenes of animal life they gave Barye; the cattle of Troyon still feed in the meadows; Corot alone is absent in spirit. for the idyllic tone and sun-steeped haze of his best callvases are not of Barbizon.

Corot's prarents were well to to people. Ife respected his father, but had a real reverence for his mother, whom he thought the most beautiful of women. Sate in life he discovered peasant relatives among the vineyards of Burgundy. He was proued of these and said, "They are good workers, and they used to call out to each other in the fieds 'iti Corot!', and I used to think they were calling ine."

Dumesnil said of Corot's appearance, "of good height, strong, of a robust constitution, with a healthful, frank, jovial expression; liveliness and tenderness in his eyes; a tone of bonhomic blended with penetration; great mobility of face." His parents sent him to the Lycée of Rouen in 1806, and there he remained seven years, receiving his entire education. His father intended to make a business man of him, but Nature got in her work ahead of père Corot. When placed in a draper's store he availed himself of every opportunity to hide away and sketch. The draper told his father that he would never make a business man and that he ought to let him be an artist.

The home at Ville d'Avray was purchased by Corot's father as a summer home, and there young Corot would lean from the open window and drink in the misty loveliness of lake and sky and tree long after all the others in the house were asleep. In the stillness, the dreany, visible dampness, the light, transparent vapors impressed him in a way that influenced all his after career. When he came to paint, it all came back to him. At Ville d'Avray his artistic sense was quickened anel his dislike for commercial life eleepened. He begged his father to let him give up business, and be an artist. His father, a shrewd business man, finally consented, but told him that while plenty awaited him if he remained in business, he would allow him only an annuity of 1500 francs if he became an artist. "Sec if you can live on that," he said, "you shall have no capital at your disposal while I live." Corot gladly accepted the ammity and began to paint. Millet's relatives thought his talent a divine gift-Corot's family did not believe he had any gift, and thought painting an idlling with life. Millet's life was a long struggle: Corot had enough to live on; he never married; be gave his life to art, interpreting Nature as she appeared to him. riffusing constant sunshine about him, with a somg always in his heart and on his lips. lieanty and gladness were revealed to him, but not the heights and depths: these are revealed only to those who have struggled and suffered. For a bong time recognition did not come to him, but when it did come he said, "1 am the happiest man in the world." Corot studied two winters with Victor Bertin, a pure classicist, then wemt on Rome in 1825. At the Acatemy ther his soctat qualities made a much greater impression than his artistic abilities. He was more apt in Nature's studio. As an artist te mited harmonionsly acalemic traditions with impressions receiverl directy from Nature. man.

Those lithe figures that dance through his summer landscapes, are the wood and river goddesses of ancient art transformed into the moods of Nature in color, form, posture and everything. Aligny, who was regarded as an authority in landscape, after secing one of Corot's landscapes, painted at Rome, told his comrades that Corot could well become the master of them all. This opened the gates of hope to Corot, and he never forgot Aligny's kind recognition. Long years after, when Corot was scventy-eight years old, he stood shivering, one cold wintcr's day in the falling snow, by the open grave of Aligny, refusing to go away till the last rites were paid to his friend. "It is a duty," he said, "a sacred debt." Few have been loved as Corot was. His gencrosity was in harmony with the rest of his great glad nature, he would never accept any money from his pupils, and gave away generonsly, cven when he had nothing but his annuity. In 1855 , he inherited an estate yielding an annual income of 25,000 francs. Success in art came about the same time. He placed the income out of his reacl, allowing it to accumulate for his nephews and nieces. His labits were simple, and he used the surplus of his income to help others. He gave away many ammities. An artist friend became blind, and his landlord was going to dispossess him. Corot purchased the place and sent the title-deed to the artist with the message, "Now they can't put you ont." He was so thoughtful. One year at Arros he painted a little peasant girl. On his return the following year, he learnced that the child had been drowned. He carried the picture to the parents and said. "Here is your little girl come back to yon," and was repaid by the great joy and gratitude of the parents. He was loved as a comnade and respected as a master among the landscapists twenty years his juniors. Dumesnil says that in his younger days he was the gayest of the gay in the dances at the Acadeny of Design. Every spring he fled to the country. He said. "I have a rendezvous with Nature, with the new foliage and the birds." He painted, smiling of singing or talking with the hirds and trees. When evening came he would say, "Well I must stop, my Heavenly father has put out my lamp."

Corot's "Paysare," in the Lonvre, seams the actual expression of the life and spirit of its maker. It is a pieture of a lake resting in the silver haze of a summer moming. The eye pierees through the mist to the far away shore where the rising sun s ems to be falling in drops of light on the glassy surface. The wooter shore is hatf revealed. half
shrouded in mystery - fit home for elusive, mysterious people of Nature.

In "Le Matin" Corot has painted these elusive, lithe beings-not mortal, not divine, not heroic, but wonderfully blending with the tones of the landscape. Who has not felt in the solitudes of nature that only a thin veil hides from us a life that is all about us?

Corot never thought he painted grand things. Before a painting of Delacroix's he exclaimed, "He is an cagle; I am only a skylark. I send forth little songs in my grey clouds."

Dumesnil thought that Corot's religions paintings gave evidence of capacity for grand art as represefited by Titian, Rembrandt and such. Nature shimmers through Corot's landscapes - dreamlandscapes whose quiet beauty grows on one as they are studied. He did not labor over his pictures. He feared to tarnish in an after hour the fresh grace of what Nature had revealed to him in the hour of her presence. This fresh, unlabored quality is the distinctive charm of lis canvases.

The grand metal of honor was not given to Corot after the exposition of 1874 . His friends were disappointed. They thought it would have been fittingly conferred as a final and full recognition of the master's work. Consequently a movement was started among his admirers and friends, and a gold medal was prepared. Three or four hundred artists and friends met at the Grand Hotel to welcome the dear old master with great cnthusiasm and affection. Amid the enthusiasm of the presentation of the medal, Corot whispered to the presiding officer, "One is very happy to fecl onc's self loved like this."

A short time before the presentation of the medal, Corot's sister, who had shared his home, died. His health rapidly declined after her death. He still went to his studio, but could not paint. A few days before his death he said, "I have had health during seventy-eight years; I have had good friends; I am thankful." On his deathbed he heard of Millet's dcath. His death was kept from Barye, then dying of heart discase. In his last moments Corot's right hand moved along the wall; his fingers scemed to be holding a brush; then he paused and said, "Look how beautiful it is! I have never scen such landscapes before." On Tuesday, the 23 rd of February, 1875, the great, glad heart of this generous, much loved child of Nature ceased to beat and his spirit went ont throngly the silver mists to meet the God of Nature, waiting in the dawning of a glorious morning on the other side.

## Art Notes - VII.

By Hunter Boyd, Wawelg, N. B.

## Feeding Her Birds.

The picture, which Jean Francois Millet painted in 1860 and exhibited in the Salon in Paris in 1861, whilst peculiarly appropriate for Primary Departments will repay the attention of older scholars.
The name given by the artist was Becquec which may be roughly termed bcakful, and readily suggests the small portion of food which a mother bird holds in her beak for her young family. Considered poctically it is easy to recognize other points of resemblance to a cozy nest and the tender care with which the nestlings are watched by parent birds. We say birds, for although it is the mother who is feeding the little ones, the father is seen in the orchard just beyond the house, busily engaged for his fanily, and thus it appears a beautiful scene of healthy, peaceful home-life. The little girls wear caps not unlike the one on their mother's head, but their younger brother has on a kind of tam-o-shanter. They are evidently fond of him, and the wee fellow enjoys the first taste from the steaming bowl. In other instances we have found that Millet's subjects were absorbed in their respective occupations and possibly so small a matter as the tilting of the stool on which the mother is seated helps to indicate the intensity of her act. Just as the thick bare walls of the honse are clothed with a beautiful vine, so these peasant folk in their course durable clothes, and clumsy-looking sabots, yield a vintage of human affection to the quiet-eye, and we are not surprised to learn that Millet, who was so fond of his faithful wife and their nine children, and also spent much of his time in digging, regarded this as his favorite picture.

Teachers are urged not to attempt to describe the picturc. Seek however, to enconrage conversation in the class on all the details, especially as to the relationship of the children to each other, and then to their mother, and ere long it will appear to some of them that the point of the spon which is thrust forward is not greatly malike the beak of a bird, and they will cnter into the eagerness with which the little birds are fed who have become lomngry at their play. But let Millet first make his own appeal, and after that the sclonars may receive further light from the teacher's olservation, or from these motes. Remember art is interuled to sumply good grommes fir eroking the higher emotions. We wish to share those of Millet ats he glaneed in that demeryard.

## Replies to Queries,

Nora. It is a brother of the famous Jean Francois Millet who has just died. His name was Jean Baptiste Millet. He excelled as engraver. J. F. Millet's son is also an artist, and 1 believe that some of his work may be seen in the Art Academy at Sackville, N. B. There is also an artist named Francis Davis Millet, who painted "Between Two Fires."
R. S. L. Encourage your seholars to observe the movements of any experienced sower in your own locality. A man will not pass over a field very rapidly, but if he be as fully engrossed in his sowing as Millet's peasant, his action will tend to become as rhythmic.

Beginner. It would be a good plan to arrange a series of scenes, commencing with ploughing, harrowing, seeding, reaping and so on. Gleaning is little known in this comntry, partly because there are few persons to do it, and also because most farmers would say "what's the odds of a few oats or a little wheat anyway:" But the custom still has beatiful associations of thrift and generosity.

Evelyn. See preceding auswer. You can also arrange a series according to time of day, e. g., there are several pictures of men and women going to work, also the noon-day rest. and returning from labor. Invite your scholars to bring a cent and purchase a set of the Perry l'ictures illustrating a day's work at various seasons.

The following anectote, says Harper's Weekly, is told of a prominent Baptist minister, celebrated for his caustic wit: He was speaking once at a dimer given to commemorate and important event in the history of New England, his text being "The Pilgrim Fathers." "I have always," he said, "f.lt the deepest sympathy for the lilgrim fathers, who suffered such extraordinary hardships in establishing a foothold in this comutry. lint, sorry as I have felt for the Pilgrim fathers, 1 have felt still sorrier for the Pilgrim mothers; for not only were they olliged to endure the same hardships, but they had also endured the Pilgrim lathers."

1. B.

Your paper is of the greatest value to me, as 1 think it surely is to any teacher. I wish yon many successful years in your splondid work of helping the teacher.

Northumberland Co. M. (i. M.

## Notes from the Macdonald School, Guelph.

By M. G. I., A New Brùnswick Teacher.

We New Brmswick teachers who are taking the nature-siudy course at the Macdonald Institute at Guelph, would like to tell our fellow-teachers a little about the work we are doing here. There are fifty students in our class; scven are from New Brumswick; the remaining forty-three are from various parts of Canada. We feel that we are a part of the Mactonald movement which means better teaching for Canada.

We find a great teacher in Professor McCready. He has led us to realize as never before the importance of nature-study, which takes for its thought the child and its natural environment. It is possible to get children in love and sympathy with nature.

> "There is no glory in star or 1 possom Till looked upon by the loving eye. There is no fraguance in April breezes Till breathed with joy as they wander by."

The child's earliest education is almost entirely in nature. It is an education of secing and doing. Teachers who realize this and who have much love and sympathy for chikdren will prove, by making a wise use of what has been gathered from the course pursued here, proper methods in teaching naturestudy.

Much of our time is spent in field work in the study of plants, insects and birds, under the direction of Professor McCready and members of the college staff. Excursions are made to the different departments of the Agricultural College where we always find a willing and helpful instructor.

Our aim as teachers is not to memorize the names of a great mumber of plants, birds and insects; but to grasp the new methods of giving instruction in the subjects of the course.

Soon we shall finish our work here and return to our own provinc:; but we shall ever carry with us p.easant remembrances of our visit to the Guelph Macdonald Institnte and the Agricultural College. We shall also feel grateful to our leader Professor MoCready, who has so thoroughly taken up this work with us and to our govermment which has seen the wistom of sending us here.

From a recent subscriber: 1 enjoy the Review very much and ahways look eagerly forward to its coming. It offers so many useful hints and suggestions, that 1 sometimes wonder how 1 managed to do without it so kong.
M. L. 1).

## An Open Letter to Kindergartners.

To tife Kindergartners of the Marithae
Provinces, and to-all who are Interested in Cilild-Culture.

By Mrs. Catherise M. Condon.
When the history of the Kindergarten movement comes to be written, it will be painful to find how little direct and acknowledged effect it has produced on our public school system up to the present time. In 1886 there were three small, struggling private kindergartens in Nova Scotia, two of them in Halifax, and one in Yarmonth. They were private enterprises, but did good work. These failed for want of financial support. Here let me remark, that personally, it has always appeared to me, the burden of ways and means should be assumed by a capable committce, so that the kindergartner may devote herself wholly to her work without distraction, (Here follows a history of the kindergarten movemint in Nova Scotia and New Brunswick, with the names of those directly associated in the work).

A well-conducted kindergarten is its own best ${ }^{-}$ argument, and no intelligent person can carefully obscrve the busy, happy little ones, following the dircctions with alacrity, because they have learned, even those, who are "little Turks" at home, that, obedience produces pleasure in well-ordered circlegames, and pleasant work at the tables. See how industrious and attentive they are; no listlessness here, but all eager and alert, and looking out for the next pleasant expression prepared for their productive self-activity. Kindliness and good manners, the "morals of the heart," are in the very air of this "Paradisc of Childhood." As a preparation for the school, this genial training of cye. ear, hand and mind camot be over estimated, and those who have studied Froebel's methods most carefully, and have seen them carrical out most frequently, under the most varied condiiions, feel deeply, and see clearly, the need of this addition to our common school system. There is but one way to further this great reform; and that is for the people themselves to look into the claims made by the advocates of kindergarten extension, and if (as they, will) they find those claims are founded on sound views of life and a correct palagogy, then it will be their duty to make up their minds to further the movement in cvery reasonable way. The seed has been sown, and much pationt labor has been bestowed by the few who have the strong conviction of the value of froebel's system, born of study and experience. If
mothers, teachers, inspectors, school boards and educational bodies generally had been willing to examine the matter in order to see "if these things are so," and then have thrown their influence into the scale, there would be today kindergartens in connection with some, at least, of the large graded schools of these provinces, and our teachers in mixed schools would have been encouraged to make themselves acquainted with the methorls of the kindergarten, so that they might keep the little ones happily and profitably employed, instead of forcing them, at once, to sulmit to rigid scholastic methorls, unsuited to their tender years.

It will be said govermments shoukl take it up. Yes, they should, but governments get to rum in a groove, and grow stiff with officialism. They usually steer clear of taking the initiative. No one who has watched political carears will deny this general tendency. But in all fairuess it must be conceded that goveruments are compelled to a certain amount of conservatism, and may reasonably expect a mandate from the people for any striking departure from use and wont.

Meanwhile let kindergartners advance their banner, inform public opinion, invite teachers and outsiders to come and see their principles in operation, point out their effects on character, answer objections dispassionately, and show teachers of all grades what a help it will be to them when kindergartens are the order of the day. Be zealous, wateh for opportunities to speak a worl, well-chosen, urge upon the tax-payers the great value of the begimnings of manual training in the kindergarten, where it has so conspicuous a place, if they are to receive an equivalent for the large sums they are spending (and wisely spending) on science, mannal training, agricultural and art schools. If you arranged your arguments in a rational mamer, you will find this view very effective in gaining advocates for kindergarten extension.

In conclusion let me urge every kindergaten to send an exhibit, this autumn, to the Exhibitions at Halifax and St. Johm, no matter how small, but let it all be luenest work, really done by the little lrands themselves. There will be a full exhibit of Milton Bradley's Kindergarten Material, (unsurpassed in quality) from his agents, Stemberger \& (\%. in Toronto. It is to be hoped that all will visit this part of the Exhilition, and do their best to explain and illustrate and show what a help, in the training of the child these things may become, looth in the loms and school.

As was done last year, Miss Hamilton will take over and conduct a class from Dartmouth, at the Halifax Exhibition. This was much appreciated then, and aroused great interest. If only some generous person would pay the expenses of a class from the normal school it would add to the interest. If als the kindergartners in the province will come to the Exhibitions, prepared to explain some special point of kindergarten work, much good may be accomplished. But begin at once to explain to the children what the Exhibitions are, what will be shown. Make it a lesson in the love and pride of their own dear native land, stir their hearts to do their part, by preparing some specimens to send, of their pretty hand-craft, to show how happy children enjoy thanselves in work. If we all act together wisely, this opportunity should greatly help kindergarten extension in the maritime provinces.

## Dalhousie Convocation.

The anmal convocation of Dalhousie University was held in the hatl of the School for the Blind. The departure mot with approval in many quarters. The undergraduates were conspicuous not by their noise, but by their alsience.
The closing cerceises of the year have been gradually growing in interest. Four years ago Class Day exercises were introluced by the students. This year the Alumni took a more active part, giving a dinner to the graduatiss, and holding a reception in the evening of Convocation Day. The reception given by the graduating class was one of the most (njoyalle of the week. The conference held at l'ine llill by the B 'resbyterian College for their Alumni, at which brilliant courses of lectures were given by I'rofessor Short of Queens. I'rincipal Falconer, Professors Magill and Morton and others attracted many visitors to the city:

The Convocation of the Coniversity was enlivened by the elogutnt address of (iovernor Fraser, one of the L'niversity's best known sons. In introfucing him the l'resident referred to the fact that Governor Fraser and (iovernor Dackinnon of I'rince Edward Island, both Dathonsie graduates. were holding the high st offices in their mative province, at the same time that Mr. Justic: Sedgwick, another Dalhonsie graduate. wats at the head of the grovernment of Canala in the alsence of Lord (ires.

I'resideme Trotter of Acadia t'nivercity received the homorary degree of doctor of laws, and ackinwledged the homor in grace fal terms. In proposing him, Ir. Mac.atedan on lumalf of the semate referred to his great services to Vcallial liniversity
and to higher education, and expressed regret over his retirement from active university work in Nova Scotia.
Professor Short of Qucenş University whose able addresses before the l3oard of Trade and theTheological Conference left a deep impression on Haligonians, spoke briefly and impressively.

Seventy-five degrees in art, science, engineering, law and medicine, were conferred, and several important prizes and scholarships were announced.
Thirty-six, (of whom ten were women) received the B. A. degree; three the B. Sc.; one the Bachelor of Engineering in Mining; fourtcen the LL. B.; thirteen, (one a woman) received the degree in Medicine; six the M. A. degrec; one the M. Sc.; and one the honorary LL. D.

Of the Pachelors of Arts six came from N. B., two from P. E. I. and the rest from N. S. Of the Bachelors of Laws N. B. claims one, P. E. I. two, Quebec one, and N. S. the rest. Two of the graduates in Medicine were Acadians.
The Acadians are taking greater advantage year by year of the educational advantages of Dalhousie. In addition to the two receiving the degree in medicine, another received the prize for the best standing in chemistry and materia medica; three attained a high standing in law, one being among the very best in the class. This record is most praiseworthy.

The science research scholarship (value $\$ 750$ a year for two years) and the Rhodes scholarship were blue ribbon prizes of the session in science and literature. The former went to Johnston MacKay, a son of Superintendent MacKay for a research in "Hydroxylamine;" and the latter to Arthur Moxon of Truro.

During the year the Cape Breton Alumni offered a bursary of $\$ 50$ and the Mining Society a scholarship of $\$ 60$ for competition among the students in mining. The latter was awarded to Mr. F. A. Grant.

Diplomas of honour were awarded to the following on taking the li. A. degree.
Classics.-High Ilonours.-Arthur Noxon.
Exglisn and History. - Honowrs. - Bhanche Eunice Mhrphy, Harry Clement Fraser.
Pumosoplis:- High Honours. - Harry Stuart l'atterson.
Honours.- Jrancis l'aul lanilton Layton.
Pure and Appled Mhtmematics.-High Hon-ours.-Charles Thompson Sullivan.
 ours.-Henry Jermain Creighton.

Candidates for honours restrict their studies during the third and fourth years to one or two subjects. To those who do not specialize but take high standing in all the subjects of the regular course for the B. A., diplomas of dis.inction are granted. These diplomas are intended to represent as much work and be as difficult of attainment as honour diplomas. Two were grauted this year as follows:Great Distinction.-Edward Wilber Nichols.

## Distinction.-Anina Elizabeth McLeod.

The following prizes were granted to those completing their courses:-
Rhodes Scholarship.-Arthur Moxon.
Nomination to 185i Exhibition Scholarship.G. M. J. MacKay, B. A.

Sir Wa. Young Medal.-Charles Thompson Sullivan.
University Medals.-Classics.-Arthur Moxon.
Chemistry:-Henry Jermain Creighton.
Medical Faculty Medal (Final M. D. C. M.).D. A. McKay, B A., B. Sc.

Avery Prize (Gencral Proficiency).-Edward Witber Nichols.
The following turdergraduates were successful in wiuniug prizes:-

Junior E'ltrance Scholarships:
Mackenzie Bursary.-Effie May Thomson.
Sir William Young Scholarsinip- J. Congdon Crowe.
Proflessors' Scholarsinips.-W. R. Armitage, Florence E. Dodd, C. D. R. Murray, E. Clara Walker. Special Prizes:
North Britisil Bursary (Second Ycar, General Proficiency).-E. A. Munro.
Waverley Prize (Mathematics).-G .W. Stairs.
Cape Breton Alumni bursary (Third Year Min-ing).-Not awarded.
Mining Suchety Scholarship (Third Year Min-: ing. -F. A. Grant.
Dr. Lindsay Prize (Primary M. D. C. M.) -S. R. Brown.
Frank C. Simson Prize (Chemistry and Materia Medica).-13. A. Leßlanc.
Higher degreas were conferred as iollows:Master of Arts.
Harriet Mnir Bayer, B. A.-By Eramination in History:
Charles Tupper Baillie, B. A.-By Thesis-Macaulay's Prose Style.
(harles Jacob Crowdis, li. A.-By Eramination in Philosophy.

George Moir Johnston MacKay, B. A.-By Thesis -"Hydroxylamine."
Murdoch Campbell McLean, B. A.-By E.ramination in Modern Ethics and Metaphysics.
Arthur Silver Payzant, B. A.-By E.tamination in Philosophy.

Master of Science.
George Humtley Gordon, B. Sc.,-By Thesis in Enginecring.

Doctor of Laws. (Honoris Causu).
Kev. Thomas Trotter. D. D., President of Acadia Unizersity--In Recognition of his Distinguished Services to Higher Education.
In his address the 1'resident referred to a gift of $\$ 200$ to the Physical laboratory by the graduating class on Arts and Science; (the gift of the class of 1905 was $\$ 201.85$ to the library) ; a gift of $\$ 300$ for Engineering instruments; a gift of a motor worth \$300.

He also spoke of the excellent work which I'rofessors MacKenzie and Jack. the newly appointed professors on physics and engineering, were doing. The University was most fortunate in securing the services of such able men. l'rofessor Mackenzie is regarded as one of the abler young physicists whom Johns Hopkins has sent out; and he has hat the advantage of two years' study in the Cavendish laboratory under the celebrated J. J. Thomson of Cambridge. Professor Brydone Jack's good work in New Brunswick is known to all.

## Encœnia at University of New Brunswick.

On Thursday, May 31st, the Lniversity of New Brunswick, at the close of a most prosperous year, celebrated its one hundred and sixth encemia. A class of thirty was graduated, made up of sixteen arts students and fonrteen engineers. Three of the thirty were young women.

The address in praise of the fommers was delivered by I'rofessor McDonald of the department of philosoply and economics. He pointed out that the highest aim in life for the educated citizen is to make truth and justice prevail. He should not stand aloof from the work of action, but should perform his part in the work of bettering the comditions of human life. This duty wats never more incumbent upon us than at the present day. in view of the recent revelations in insurance, railroad management, otrust tactics, the packing of meats and other business activities. J'residnt Ronsevelt's famons "muck-rake" speech was reactionary and harmful, tending to hush up seandats which ongho to be brought to light and to be made matters of
common knowledge, in order that legislative action might more surely be taken, and casting a slur upon high-principled and earnest men, who are working to remove evils from the body politic. The only deliverance from catastrophe that is possible for nations will come by making truth and justice prevail.

The address on behalf of the Alumini Society was delivered by Professor A. W. Duff of the Worcester Polytechnic Institute. His topic was education. He contended that the great ain of education was not the training of the nemory or of the logical faculty, but the development of the powers of imagination by touching whatever might be the subject of study with imaginative interest. He spoke of the harm of emphasizing the purely technical in study and in testing the results of study. In closing one of the finest addresses ever delivered in the University, he said that New Brunswick ought to look for distinction in the future of the great nation which Canada must inevitably become, not to her natural resources, great though they are, bit to the intellectual and moral possibilities of her people. Greece, a comery great neither in matural resources nor in industries, had left an impriss on the history of the work which had lasted till the present day and ever woutd last. Scotland with a more stubhorn soil and a more rigorons climate had played a part in the destinies of the empire, hardly second to that of her more highly favored neighbor, England. And in like mamer, in the development of an intelligence naturally great, the people of New lirunswick wonld find their highest aim and the University of New Brunswick would be the head of this movement if it received the enthusiastic support that it deserves and needs.

A most pleasing feature of the occasion was the conferring of the honorary degree of LL. D. upon two of the Lniversity's most distinguished graduates, the widly known poets and men of letters, Bliss Carman and Charles Roberts. Equally deserving was the degree of M. A. bestowed on Mr. S. W. Kain.

After the regular programme was completed the students presented 1)r. Scott, who has risigned the chair of Dhysics to take the position of superimendent of schools in Calgary, with a gold-headed ellony walking-stick, decorated with a bow of red and black ribbons, the student's colors. The adIress of presentation was reat hy Mr. (: W. Clark. finally Chancellor larrison amomecel the name and spoke at some length upem the qualifications of 1)r. Seotes surcessur. Hhe is I'rufestor Simon of King's Colloge, Windsor. J'rofessor Sahnon wats the holder of a scholarshin) at (gneen's College, Cann-
bridge, and graduated from Cambridge University with honors in Mathematics. He remained the next year at Cambridge studying Physics and Chemistry, and taking a laboratory course imder Professor J. J. Thomson in the laboratory in which most of the great advances in physical research lave been made in England. He was five years assistant to Professor Henrici in the City and Guilds Central Technical College, London, the best and most efficient Engineering College in London. He there instructed classes in civil, mechanical and electrical engineering. For the last two years he has held the chair of Physics and Mathematics at King's College, Windsor.

Professor Henrici says of him, "he is a very good mathematician, an excellent and conscientions teacher, a good disciplinarian and a thorough gentleman."

Professor Dixon of Birmingham University, England, says, "he is a gentleman, very energetic and a very hard worker and has the great adyantage of knowing the country."

President Hannah of King's says, "He is quite an authority on the subject (of Plysics) and has written an admirable text-book that is wiming its way in schools and colleges." "He is well read in many other subjects than his own and takes the keenest interest in all the questions of the day." "He has been in this country long enough to be quite Canarlian in sympathies."

## Convocation at Mount Allison.

Never probably in the history of Mount Allison were the exercises all held in such unpleasant weather. On Saturday just as the sports were beginning rain scattered the spectators precipitately: and it came down with a drizzle or fast and furious till Wednesday morning. Not till Wednesday evening after the visitors had gone did a fitful gleam of sunshine glint over the soaked lawns and muddy strests. Of course outdoor exlibitions, such as the Athletic Sports and the young ladies' drill on the lawn were wholly impossible. Yet in spite of wind and weather the varions indoor exercises and entertaimments were well attended. There was an absence on the streets of gay stmmer attire, since visitors and students had to go ronnd swathed in water-proof garments, but the comtinuance of such unseasonable weather became after a while a sort of joke and almost adderi to the gaiety of the ocoasion.

In greneral the year was a mest shecessful one. The Searlemy has hat the laterist attendance of recent years, and sent out a matriculation class of
fifteen in addition to a number of graduates in bookkeeping, shorthand, typewriting, etc. . The two Alumni scholarships offered for mathematics and languages to those matriculating into the University, were won respectively by Eldred Boutilier of Centreville, N. S., and Arthur Le Grand of Paspebiac, Quebec. Although both students have French names, English is their mother tongue. The Academy staff will have several changes. Most note-worthy is the departure of Principal Palmer's chief assistant, Mr. W. A. Dakin, 'O4, who is to enter on the study of medicine. Mr. Dakin, who has a fine baritone voice, and sang frequently, both solos and in choruses, will be much missed in Mt. Allison life.

In spite of the recent additions the Ladies' College was this year filled to the utmost, and Dr. Borden found himself reluctantly compelled to refuse applications. At the amniversary exercises diplomas were presented to twenty-sevan students who had completed courses in some line of work,-music, vocal or instrumental (piano, organ or violin), oratory or household science. The gold medal offered by Henry lirks \& Sons of Montreal, for the highest general average in all studies was won by Miss Vera Mollison of Yarmouth, formerly of St. John. The names in the prize list suggested the wide range from which students are drawn, since there were representatives not only from all the maritime provinces, but from Newfoundland. Pennsylvania and St. Kitts, W. I. The music showed the excellence and finish that have hitherto characterized the efforts of Dr. Archibald and Professor Wilson. The latter is to spend the summer in England, but both he and Dr. Archibald will resume their duties in the attumn. Professor Hammond was absent, having sailed for England ten days ago. Several of his paintings were, however, on exhibition in his studio in the Art Gallery: Miss Bessie McLeod who was his assistant a few years ago, is to return to her position. Miss Foster, the vocal teacher, who has been so popular, is obliged to return to her home in England. It is expected that another young lady from the Royal Academy of Music will be her successor. Miss Ruggles of Boston, who will be remembered by the students of a couple of years ago, is to return as the other vocal teacher. Miss Nellic Clark of Rexton, N. 13., who graduated two years aso and has since been studying in Leipsic, has been given a pasition on the conservatory staff. Miss lowker has resighed and a new associate with Miss Carver in Oratory is to be appointed. Some changes lave been made in the literary course (M. I. A.) of the Ladies' College. by which all who complete it will, while having a
wider range of studies, have finished the mathematics, Latin ctc., of the Freshman year in the University and be prepared to graduate in the University in three years.

To relicve the crowding of the previons year the fourth story of the University Residence-giving thirty extra rooms-was at the beginning of the past year ready for occupation. This extra space was necessary on acconnt of the additional students that were coming to pursue courses in engincering. A new professor, J. W. Crowell, B. S., C. E., of Dartmouth College, was appointed in charge of Surveying, etc. Under lis direction the students have done some interesting work. Most noticeable are the plans of the Mit. Allison grounds showing the location of buildings, drives and walks. elevations, areas etc. These, both in their original form and in blue prints, have been on exhibition and attracted considerable attention. Four men completed the two years' course admiting them to the third year at McGill in applied science. Fiftenn men entered on the full work in enginerring this year; several on the Arts course are taking options in that department, and the outlook is good for the coming year.

The degree of $B$. A. was conferred on a class of ninctenn, four received M. A., and l'rofessor Crowell was given B. S. (ad cundem). Several members of the class go to McGill for medicine and applied science, two or three will enter a law school, two or three become mimsters, and some will teach for at least a yoar or two. At the head of the class was G. Roy Long of Tyne Valley, I'. E. I., who delivered the valedictory: He was also the leader of the Mt. Allison debating tean which last winter won against Dalhousiz in the Inter-Collegate debate. He expects to pursue a post-graduate course at Harvard. At the University Convocation an address was delivered by Professor Tory of MeGill. He was also a guest and spoke at the banquet of the Almmi and Alumuac Societies on Tuestlay evening. At this in spite of the rain aloont one hundred and fifty sat down at the tables. An address was there read which had been sent by Mr. M. J. liutler, Deputy Minister of Railways, and which arrived too late for Convocation. Dr. J. M. Buckley, editor of the Christian Advocate of New York, lectured on Friday evening and preached the Baccalaureate sermon on Sunday.

It is not necessary to refer to the prizes of the year except to notice that the two Fred Tyler scholarships of $\$ 60$ each which have been awarded to the class of 'or year by year since the death at the
end of the Freshman year of the young man in whose memory they were founded, will henceforth be given in perpetuity to the Freshman class. A new permanent scholarship is amounced for the Theoogical department, endowed by Mrs. Paisley,

The mecting of the Board of Regents which cosed the proceedings for the year passed quietly and quickly. The last instalment of the Massey bequest of \$100,000 laas just been paid and enabled the Prisident of the University to meet better the increasing expenses of buildings and salaries. Although Mf. Allison has had a prosperous year, yet many plans for progress and increased usefni'mess are checked by lack of means. New and enlarged accommodation is needed at the Ladies College and more instructors and professors at the University.
[The closing exercises of Acallia L'niversity are being held as the Review goes to press. An account will appear in our next number.|

## Practical Problems in Arithmetic.

1. A note of $\$ 250$ dated Nov. 29th, at 3 montlis with 4 per cent interest, was discounted Dec. 20th, at 6 per cent; find the proceeds.
2. Find the time in which $\$ 200$ will amount to $\$ 225$ at 3 per cint.
3. Fincl the compound interest on $\$ 200$ from Marcli 16, 1900, to August 9. igoz, at 6 per cent a year, payable half yearly.
4. A book cost $\$ 5$, and was sold at a marked down sale at a discount of 25 per cent. This caused a loss of 10 per cent; find the marked price.
5. The cost price was 80 per cent of the selling price, the selling price 90 per cent of the marked price; at what per cent aloove cost was it marked.
6. The gain was 20 per cent, the discount 20 per cent; find the gain per cent had no discoment been given.
7. Find the rate par cent at which $\$ 375$ will amount to $\$ 427.50$ in 4 years.
8. A cask which bolds a metric ton of water is full of barley worth 75 cents a bushel; find its. value.
9. 600 kilograms cost $\$ 2.50$ a kilogram, the duty was 40 per cent, the gain 30 per cent ; furd selling price per oz. apothecariss.
ro. A merchant luys his goods at 20 per cent discount on list price, and sells at 15 per cent more than the same list price; find gain per cent.

Answers. - (1) Amount \$252.58; I'roceeds $\$ 249.55$. (2) 4 1-6) years. (3) $\$ 30.50$. (4) $\$ 6$. (5) 388 -9 per cent. (6) 50 per c.nnt. (7) $3 \frac{1 / 2}{2}$ per cent. (8) \$20.63. (9) 14 cents. (10) $4.3 .3-4 \%$.

## A Nest in a Pocket.

A little bird went to and fro. Once in the nest'ing season,
And sought for shelter high and low, Until, for some queer reason, She flew into a granary Where, on a mail swspended, The farmer's coat she chanced to see, And there fer seanch was ended.

The granary was in a loft, Where not a creature met her;
The coat had hollows deep and' softCould anything be better?
And where it hung, how safe it was, Without a lreeze to rock it!
Come, little busy beak and claws, Build quick inside the pocket!

You never saw a prettier nest In rye-field or in clover, Than this wherein she sat at rest When building work was over. Three speckled eggs soon wamn'y day Beneath the happy sitter;
Three litttle birds-oh, joy!-one cay Began to chirp and twitter.
You wond thave laughed to see them lie Within the groal man's pocket,
Securely thid from every eye As pictures in a locket!
Busy and blissfully content, With such a place for hiding.
The little mother came and went To do their small providing.

And not a creature wandered in, Her nastiings to discover, (Except a wasp that now and then Abont ber head would hover).
Until-ah, can you guess the ta'e.The fanmer came one unoulning, And trook his cront down from the nand Withont a word of warning!
Poor little frightened mothertling! Up from her arest she fluttered, Aud straigluthay every gaping thing Its wide-mouthed terror uttered.
The good man started back aghast; But menry was his wonder
Whest in the pocket de at last Foumbl surh inlooked-fior plander.

He laugherl and daugliec, "Upon my word," He said alourd, "l never!-
Who could suppose a litutle bird Wound alo a thing no clever?
Come now! 'twou'd be a shame to harm The fruit of such wise labor,
I wouldn't hurt you for a farm, My pretty little neigl!bor!"
lle put the eont back carefully: I guess I have another;

So don't you be áfraid of me You bright-eyed little mother.
I know just how you feel, poor thing, For I have youngsters, bless yon!
There stop your foolish fluttering
Nobody shald distress you."
Then merrily he ran away
To tell his wife about it,-
How in hris coat the nestlong lay, And he must do without it.
She laughed, and said she thougith he could! And so, all unmolested,
The mother-birdie and her brood Safe in the pocket rested.
Tiill all the little wings were set In proper flying feather, And then there was a nest to letFor off they flocked together.
The farmer keeps it sti'l to show, And says that he's the debtor;
His coat is mone the worse, you know, While he's-a bibttle better.
-Mary E. Bradley.-From St. Nicholas.

## The Treasure-Trove of Springtime.

There are treasures in the garden, Buried low and buriod deep,
Such as ibuccaneers and pirates
Had not ever in their keep.
You may find them if you seek them During April on in May,
With the spade and fork and shovel, In the good old gardenning way.
Captain Kidd hath never hidden Any golds beneath the sod
That is brighter than the yellows Where the daffodils do nod.
And the golden cups the tulips Will lift up, are greater gain
Than the spoids from out the trolds Of all the gal'eons of Spain.

All the angosies and carvels Whioh the Corsairs chased of oks,
Did mot flaunt such challenge-bamers As the roses shall unfold."
And the rolls of silks and satins
Won as plunder,-what had they
Like the velvet of the petals Of those rokes to display?
And the bales of stuffs from Persia, And the rugs of softest dye.-
Witld the paintings of the pansies May they ever hope to vie.
And' the ropes of pearls, the rubies And the jewelled diadems,-
Does not every dew of summer Crown the flowers with its gens?
Oh, the Joardings of those rovers And their dollars and doubloons, With their chink of precious metals,-

How they sing their merry tunes!
But the lidies of the valley
As they twinkle on the stem
They can ring a chlime of silver Which shall more than rival them.
So, go you all a-gardening
To win the joy of life!
Go make the stubborn soil give up Its riches ripe and rife!
You will find them if you seek them Duting April or in May,
With the fork and pick and shovel, In the good old grardening way.
Dig deep the spade, and with a will Uplift the wealth that's there!
For in the earth there is no dearth Of riches, everywhere.
IV. D. Ellacanger.-I'all Mull Magazine.

## The Sunbeams.

"Now, what shall I send to the Earin toribay?" Said the great, round, golden Sun.
"Oh! let us go down there to work and play." Said the Sumbeans, cvery one.
So down to the Earth in a shining chowd, Went the merry, busy crew;
They painted with sp'endor cach floating clound' And the sky while massing through.
"Shine m, tittle stars, if you like," they cried, "We will weave a golden screen
That soon all your twinkling and light shall hide, Though the Moon may peep between."
The Sumbeams then in through the windows crept -To the children in their beds-
Threy paked at the eyelids of those who slept, Gi'ded all the litt'e heads.
"Wake up, little children!" they criexl in glee, "And fiom Dreanland come away!
Weंve brought you a prosent, wake up and see! We've brought you a sumy day!"
-Emilic Poulsson.

Now is the time to begin the lessons of the preservation of plants: to love a flower and "leave it on its stalk." When a chitd has learned that. he has learned a great deal more than that. I saw a most tempting butuch of black-eyed daisis last summer in an open field, and went to them with a hungry hand. A friend with me said, "I've struggled with myself for two weeks not to pick those so that others might enjoy them." I pansed, ashamed. She had learned her lesson. I had not. Bitt to gather flowers gently that no root be disturbed or next year's blossoms doomed-that's another lesson. Teachers have been thonghtlessly guilty in the past in praising the flower gifts of children regardless of how or where they were gathered. Let us atone.-Sclected.

## Guess the Names.

Guess the mame of the goddess that's fairest of all, The name of the god that's most fair,
Then the nord which describes into what they may fall If the little biind god match the pair.
The thind word is English, now give the Greek name
For this god who though blinded is gay
And who snixes things up when he's ruling the game In a maddening sort of a way.
Then, fiflhly, discoven the name of the youth Who cared mot for matron or lass.
And neer fell in love tild the founci a smooth pool Where he saw his own face in the glass.
Next scurch for the name of the comedy muse, A lady both classic and merry,
Then the muli-hued goddess who shows through the clouds And uses the bow as her wherry.
Number eight is the beautiful groddess of night, Sulnduer of god and of men,
And, lastly, we call on the love slaughtered nymph Whose voice comes aggain and again.
Then take ayd the nanes and the wonds you have found, Behead every one of the nine,
And arrange all the letters you've cruelly chopped off, From the top to the bottom in line
You will find that they spoll what at this time of year Is considesred especially fine.

Guess the name of the city of brotherly love, The city that is a sore throat,
The ity renowired for its scents, good and bad; The city that lightly doth float.
The city once noted for blades of fine stecl, The city that's easy to reach,
The city dhat's famous for hats and camals, The city that's soughit at the lleard.
The city where witchas were thich for their lives, The (ity in which Lincoln died,
The city that cnows with a loud, ratwous voice; The city where knots are untied.
The city that set the s'ares free years ago, The city with one golden gate,
The city that's hot on the tip of the tongue, The city where Wolfe met his fate.

That the geographical area of America is not fully comprehended is illustrated by an ancedote told by at celebrated comedian. An Englishman, accompanied by his valet, had been traveling due west from Montreal for four days. At the end of the fourth day, master and servant seated themselves in the smoker of the train, whence the man looked steadily out of the car window. At last his companion grew entious.
"Jolm," hee said, "of what are you thinking."
"I was just thinking, sir, about this discovery of Hamerica," replied the valet. "Columbus didn't do such a wonderful thing when he formel this country, did 'e, sir? Hafter all's said and done, 'ow cotuld 'e 'elp it ?"-Selected.

## Current Events

Marengo, the leader of the insurgents in German Soutin Africa, has taken refuge in British territory, and is now in the hands of the Cape Colony police. This means the end of a long and very costly war between the German aur:torities and the natives.
St. Helcna, in the South Atlantic, is threatened with financial ruin by the withorawal of the British garrison. The farmers and metcinnts in the island, whose whoce ?iving was made by supplying the garrison tnoops, wi!l have no market wilhen they are gone.
Britisin rule in Egypt may be looked upon as now firmly atallishock, sinse Turkish imperia' troops had occupied centain Egyplian territory in the peninsn'a of Sinai, and the Sultan has been forced to recall them at the demend of the British Government.

The independence of Cuba is a fiction, quite as muth als is the Turkish sovereignty in Egypt. The senate has amended the treaty between Great Bitain and Culfa, because it is known that the Uuluted States government did not approve of the treaty in its original form. It is not expected that Great Britain will be willing to arcept the amendments; so the treaty is probably dead.

At Halifax, on Victoria Day, for the first time in whe history of the Domintion, a brigade of Camadian troops embracing the three arms of the service, infantry, artildery and engineers, was reviewed by a general offier commanding. The Halifax garrison at present numbers aboust a thonsand men of all amms.

By an a'most muanimons vote of the provincial hegislature, Regima is chosen as the permanent capital of Sashatchewan.

The now Canadian Pacific Steannhip Empress of Britain, thas thade the trip from Moville to Quebee in less than six days. The fastest previons trip over the same route was made in six days and three houns. Thronughont the voyage. the steamer was in wircless tellegraph commumication with the land, coming in touch with the vibrations from Cape Ra e before she reached the lomit of hose from the Poldhu station. Her sister ship, the Emproses of Ireland, will go on the same ronate; and a further reduction of time she the ocean voyage is expectect.

The two new Cumard liners now acaring compietion wi'l be the largest iships aflost. They will each thave accommodation for three thonsand passengers, and cary a rew of eight hundred men.

The new prowince of Allerta has decided to estabinh a telequino system umber gavernment awnership.

A new opti al instrnment, invented in Austria, is called the ulltramicroserpe. It is saind that lyy the aid of the new instrument it is possible to see particles measuring no more than the four-millienth part of a millimetre in diameter.

On the roll of the new llouse of Commons, an Irish memiler has signed this name in Geelic. This is the first time that any mentor of the partisment of the United Kingdonn has signex the rovl in ather than Englisin characters.

The Mexican government has granted to a British company the seght :o furidy a railway from the Gulf of Mexion to the Pacific coast. The line will be six humared miles in length.

The Japarese have adopted a system of compulary education for both luoys and girls. When the pupils leave
schoo', at the age of foarteen, they will be able to speak Japanesc, Chinese and English.

The insurrection among the Zu'us of Natal is not yet subdued. The Basuros sympathize with the Zulus. As the blacks greatly outnumber che nohites, the situation is serious.
The d'scovery of diamonds is reported near Coba't, in the northern part of Ontario.
Ditlon Wadlace, the New York explorer who has returned from an eleven months' trip throngh Labrador, reports that he found the lumber conditions in the interior not so good as was expected, and the minera! deposits not so ti.th as many persems had supposed.
The gypsy moth and the browntail moth are becoming yery serious fests in the United Siates. The iatter has come st far morth as Maine, and we may expect it soon to reach cur bonders.
By the recent eruption, the cone of Vesuvius nras rednced in height e:ght huncred feet, and the crater widened to a diameter of five whousand feet.

The Ioth of May, or the 27 h of April according to the Russian ca'endar, was a memorable day in Russia; for it saw the opening of the first national parliament and the begimaing of constitutional government in the Russian Empire. With the most impressive ceremonies and gorgcons display, the Empetor of all the Russias laid down his auto, ratic rule, and ca.led upom the representatives of the people to asstane their share in the govermment of the country. The new partiament has entered upon its work with dignity and restraint ; for representative govermment is no new thing in Russia, though this is their fi:st national assembly. Whether the Doruma, as it is called, wrid be able to legislate for the empire, or whether, as the prophets of evil forotell, it will yet end in disorder. the day of juts first meeting will remain a motable day in Russian bistory.
By the marriage of King Alphonso to Princess Ena of Battenburg, on the last day of May, a niece of King Edward VII. becomes Queen of Spain.

The whicf event in the Clympic games, ot Athens, was the ge eat Marathon race, which took pace on the first day of May, and was won by a Canadians athlete, mamed Sherring. The contestants inchoded Greokio, Germans, Frenohmen, Italians, Switzers, Belgians, Swedez, Danes, Egyptiams, Engli:dwnen. Canndians, Australians, and athectes from the United States. The length of the course is twenty-six miles. The Marathon race is the event in the Olympi: games in which the Greces of oid tocok mort interest: and their wescendants, the modern Greeks, think it the greatest honor to win this race. Fully two hundred thousand persons witnessed the contest, and the Crown Prince of Greece ran beside the wianer at the cose.

It is announces that the next conference of coionial premiers nwid meet at London in April next.

Canada having assumed the udefence of her own territory, the last garrison of British troops is now withd:awn. The new responsidxilities are taken up with sobemces and confidence; and, thongh our own troops are as much soodiers of the King as are those whom they replace, there was no clation, but a feeling of regret, when the last of the Imperial itroops nepmited.

British West Africa will soon produce more cotton than the mills of Lancashire require. It is estimatod that the British Cotton Growing Association will import from there this year cotton valued at more than half a million dol'ars of our money.

The Japanese nave their onvn systom of wireless telegraphy, invented by a native scientist named Kimura. To, this they attribute much of the success of Admiral Togo's fleet in the recent war with Russia.

By the underground system of wireless telegraphy, invented by Reverend Father Murgas, in Pennsylvania, messages have theen successfully transmitted for a cistance of eighteen miles.

Helium, the last of the gases supposed to be permanent, has been 'iquefied at a temperature within about two degrees of the supposed absolute zero.

Acetylenc is now used as an explosive in Genmany, nhere its use as an ilhuminant has proved disappointing. In blasting with it, the confined mixture of gas and air is exploded by an electrio spark. The rock is not thrown out, but broken into pieces small enough to be easily removed.

It is expected that a trundred thousand imnigrants will land at Quebec shis year, in addition to the womsands that have come and are coming to other Atlantic ports, and the houssands that come from the United States to setule in the Canadian provinces. A large proportion of these new settlers speak English, are fair'y well supplied with money, and are well adapted to the dife of the pioncer in the new farming regions of the west.

Oklahoma will take its place in July as a new State in the neighboring Repulsic. It is composed of the Indian Territory and the Territory of Oklahoma, its limits being approximately those of the Indian Tersitory before its division, in 1889. About one-fifth of the inhabitants are of Indian or mixed blood. These Indians, Cherokees, Choctaws, Chicasaws, Crees and Seminoles, have their own legislatures and courts for sixty years past; and their own schools and newspapers, their own languages. About one-third of them can speak and read English.
San Francisco will be rebuilt, probably upon a new ground plan, and with elaborate adornments that will'make it one of the most beautiful cities in the world.

Several revolutionary movements have taken place recently in Central and South Anterican countries, but they seem to have becn of little more than local importance. The conference of representatives of all the American Republics, which will meet in July, in the splendid city of Rio de Janeiro, is of greater interest, thougli no immediate outcome of the meeting is expected, beyond the recognition of the principle of co-operation among the Jatin-American Republics.

Please accept my thanks for the pictures sent. I think the Review without any additions is worth the money paid for it. It would be hard to let it go from the scioolroom. Argyle Head, N. S.
I. M. T.

I value ald the pictures sent with the Review very highly and take much pleasure in mounting them.
Gaspereau, N. S.
F. A. H.

## The Review's Question Box.

J. W. H. Kindly tell me the name of the plant sent herewith. The people here (Deerfield, Yarmouth County) call it the moose-wood, but it looks more like a wild form of hydrangea.

It is the American Wayfaring Tree or Hobblebush, a common straggling shrub of our northern woods. The large white corollas of the neutral flowers, which form a circle round the less showy fertile flowers of the inner cluster, much resemble the hydrangea.
S. N. Kindly tell me the name of the bird of the following description, seen near Petitcodiac, N. B. in late May. It is a little larger than the Song Sparrow, propably about the size of the White-throated Sparrow. The whole body is a bright scarlet colour, the wings and tail are a dark olive, nearly black near the body. It was alone when seen and seemed to be quite tame.

The bird is very likely the Scarlet Tanager, a very brilliant and conspictous bird, and a rare visitor in many parts of these provinces. One was seen at Ingleside, N. B., on Jinse first, the only one noted during a sojourn there of twenty years. It was quite tame. like that seen by our correspondent,and obliging. It visited a neighboring orchard, where it lingered among the top branches and seemed to appreciate the admiration of the neighbors and ounselves, who were all delighted at the vision of searlet flitting amid pink buts and fresh newly opened leaves on that bright June day. It is slightly larger than the White-throated Sparrow (Tom Peabody) and is about the size of the Cedar Waxwing.

From Chapman's hand book of Birds: "High among the tree tops of the cool green woods the Tanager sings through the summer days. Hidden by the net work of leaves above us, we often pass him by; but once discovered he seems to illuminate the forest. We marvel at his colour. He is like a Bird of Paradise in our northern landscape. The song is a lourl, cherry, rhythmical carol, suggesting the song of the Robin."
F. R. B. Recently a cannon bald weighing 15 bbs has been found imbedded at the base of the "Hopewell Cape Roeks." It was uncarthed by the action of tide and ice which occurs every spring. Is considerably rusted and surface is uneven. showing imprint of small stones. Kindly answer in Review if you think it of any historical importance.

All discoveries of this kind are of impontance as tending to stimulate inquiry into the past history of the place where such objects are found. The instance quoted by our correspondent may serve to show that a battle or skirmish occurred near the place during the French period. Search slontd be made for other relies, and their position if found,
carefully noted, and communication regarding them be made to Rev. Dr. Raymond or other members of the N. B. Historical Society at St. John where the objects may be sent. Better still, a local or county historical or natural history society may be formed for the purpose of further inquiry and study on a systematic plan. All objects, such as that found by our correspondent should form the nucleus of a local museum which would be increased by additional discoveries. This would become a most valuable repository in the coming years.

News Notes.<br>From the Springville Breeze.<br>We're pleased to slate that Mr. Wren<br>And wife are back, and at the Eaves.<br>The Robins occupy again Their summer home at Maple Leaves.

The Gandens resitaurant reports
A fresh supply of angleworms.
The Elms-that fav'rite of resorts-
Has boughs to rent on easy terms.
We learn that Mrs. Early Bee
Is still quite lame with frosted wings.
Ye Editor thanks Cherry Tree
For sundry floral offerings.
We hear of rumbred comings out Of some of Springville's ahoicest buds.

In case you run across Green Lawn,
Don't wonder why he looks so queer,
'Tis onlly that he's undergone
His first short hair-cut of the year.
-Edwin L. Sabin, in St. Nicholas.

## Birds and Man.

"They say" said the wren to the thrush,-
"I know, for I wuild at their eaves,-
They say every song that we sing on the wing,
Or hid in the leaves.
Is sung for their pleasure!
And you know 'tis for love and ourselves that we sing!"
"Did they say," sald the thrush to the wren,-
"I'm out of their circle, I own,-
Dide they say that the songs they sing were
Not for themselves alone,
But to give us pleasure?"
"Why, no," said the wren, they said no such thing.
-Edith M. Thomas.

## School and College.

Ten of the women school teachers of Woodstock have been granted an increased salary of $\$ 25.00^{-}$a year, to begin with the next term.

Mr. J. Penny has been chosen Rhodes scholar for Newfoundland. He is a student of marked ability, a good athlete, and a general favorite with his fellow students.

The National Educational Association of the United States, which was to have met in San Francisoo in July, will not be called together this year.

No meeting of the Dominion Educational Association wilt be held this year.

The American Institute of Instruotion will meet at New Haven, July 9-13.
The interprovincial committee, appointed to select a series of readers for the French schools of the maritime provinces, recently met at St. John, and made substantial progress in the assigned work. There will be four readers for the first four grades, and these will be ready for use at the opening of the term in August, 1907. The books will contain extracts from French and English authors, all in the French language. English will be taught in these early grades colloquially, according to the Berlitz method, and no book instruction in English will be introduced until the fifth grade is reached. No religious or sectarian views are to be included in the new readers, thus observing the spirit of the school law in this respect. Professor J. M. Lanos, now of Queens University, Kingston, Ontario, is compiling the book for grade one, Rev. Father Bourgeois of Memramcook, N. B., that for grade two; Inspector Hibert of Westmorland County, N. B., the other for grade three, and Rev. Father Dagneau of Church Point. N. S., for grade four.

The Gladstone Prize, one of the highest honours that Oxford University has to bestow. and the most eagerly coveted, has been, won by Chester B. Martin, St. John, N., B., the first Rhodes scholar from New Brunswick. Such a high award, won after a spirited contest in which many of the brightest scholars, gathered from all parts of the English speaking world took part, reflects the highest credit on Mr. Martin, the schools of St. John and his alma mater, the University of New Brunswick.

On the evening of Empire Day, May 23rd, the pupils of the public school at Dalhousie, N. B., L. D. Jones, Principal, aided by local singing talent, gave a concert in the Temperance Hall. The exercises were chiefly patriotic in their nature, consisting of drills, recitations, songs, etc. The hall was very prettily decorated with flags, bunting and pictures. and was filled with a large and appreciative audience. The sum of $\$ 59.20$ was realized, part of which will go towards a science outfit, and the remainder, towards reseating the intermediate department with single adjustable seats.

Miss Grace Henderson of Chatham, who has been téaching the junior department of Dalhousie Superior School, has been compelled to give up her school duties on account of ill health.

The enclosed reprints of pictures in the Review have not cnly adorned the walls of my school-room, but have proved wonderful'y inatructive both to pupils and teacher.

Kings Cominty, N. S.
A. M. G.

## TEACHERS AND PUPILS ARE SPECIALLY INVITED TO ATTEND THE

# CANADA'S INTERNATIONAL <br> St. John Exhibition, <br> SEPTEMBER 1st to 8th, 1906, <br> EDUCATIONAL FEATURES <br> will receive a merited recognition in the 

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## Recent Books.

The Vest-iocket. Standard Dictionary.-James C. Fernald, Editor. Cioth. Price 25 cents. Funk and Wagnalis Company, New York.
This is a very admirable little compendinum for constant usc, and may be carried easily in the vest-pocket, if one wishes. It combines with a dictionary of common words, their spelling, pronunciation and meaning, a great variety of interesting faots usually found in gazeteets and encyclopedias.
An Introduction to Astronomy. By Forest Ray Monlton, Ph. D. Cloth. Pages 557. Price $\$ 1.25$.
This vohme contains a very excellent epitome of the prosent condition of the science of astronomy. It will be appreciated by the ordinary reader as well as the the student. Maps and illustrations, directions fort the observation of the oonstel!ations and other objects in the heavens, with the theories regarding them that have receiyed the sanation of astronomers, are designed to give students a well balaticed conception of this fascinating scicnce.
First Year French, for Young Beginners. By J. E. Mansion 13.es-L. Clotin. Pages 120. D. C. Heath ankl Company, Boston.
These lessorms are designed for children in the mast c'ementary stage, the essentials of grammar boing taught by introducing the difficulties gradually. Exercises appended to each tesson provide ample drill.

Elementary Algebra. By G. A. Wenitworth. Half morooco. 421 pages. Nailing price $\$ 1.25$. Ginn \& Co., Boston.
In preparing a new algebra for secondary schools the atuthor has provided a new set of examples throughout the book. At the request of many temehers a sufficiently full treatice on grapis and several pages of exercises in physics have been introduced. The first chapter contains the necessary definitions and illustuations of the commutative, associative, and disistrilhtive llaws of algebra. The seoond chapter treats of simple equations and is idesigned to lead the beginner to see the practical advantages of algebraic metionds before the encounters negative mumbers.
Readings in European History. By James Harvey Robinson, Professor of History in Columbia University. Abridged edition. Clota. 573 pages. Mailing pisice, $\$ 1.65$. Ginn \& Company, Boston.
This abridged edition is intendok' especial'y for high scloonls, and is designed to isupplement the author's iniroduotion to the History of Western Europe. For oach chapter of his text he furnislies pages of extrats, main'y from vivid, first-hand accounts of the persons, events, and institutions discussed in his manual. In this way the statements in the text-book thay be amplified and given added interest and vividness. He has drawn upon the greatosit variety of material, much of which has never before fornd its way into English.

# The Provincial Educational Association of Nova Scotia 

will meet at the<br>\section*{HALIFAX ACADEMY, HALIFAX, September 25th, 26th, 27th.}

There will be three morning sessions and oné or two evening sessions. Much time will be devoted to

## Discussion on the Adjustments of the Course of Study Demanded by Modern Conditions.

THE HIGH SCHOOL COURSE will reccive special attention in discussing the Report of the Committee on High Schools and Collegcs.<br>There will be no afternoon sessions, so that members may be free to study the Natural History and Industrial Products of the Dominion at the Dominion Exhibition, which will be open at that time.

A. MCKAY, SECRETARY.

La Grammaire. An anusing comedy by Eugene LaBiche. Edited with notes and vocabulary by Moritz Levi, professor of Romance languages, University of Michigan. Cloth. Pages 70. Price 25 c . D. C. Heath \& Co., Boston.
No nation has produced such a series of excellent comedies as France, and LaBiche is one of the most amusing in his writings, extravagant and full of comic situations, yet spontaneous and witty to a most entertaining degree. This little book will make the French student read in spite of himself.
Ans Goldener Tagen, Von Heinrich Seidel. Edited with notes and vocabulary by Dr. Wilhelm Bernhart. Cloth. Pages 144 . Price 35c. D. C. Heath \& Company, Boston.
An interesting little volume for students of German, with a portrait of the author as a frontispiece,-the strong, material looking face of one who made his way from his father's country parsonage to the position of a leading engineer in Germany's railway system, and yet who has the secret of interesting healthy young people in felicitous, out-of-door narrative. It is a well romnded story of somance and adventure forming a piece of educational literature well suited for the schoolroom.
The Art Reader. By P. E. Quinn. Cloth. Pages 167. Price to teadhers 90 cents. A. W. Elsom, Boston. Copp, Clark, Company, Toronto.
This book, handsomely bound and illustrated. is designed for supp'ementary reading in sichools. Its contents embrace descriptions of Egyptian, Greek and Roman antiquities; masterpieces of the old and more recent artists, great churches, etc. The book is very suitable for teachers who are endeavoring to interest their pupils in artistic reproductions of the great masters, to create a taste for art and to give suitable instruction in it as a branch of know'edge.
Dynamic Factors in Education. By M. V. O'Shea, University of Wisconsin. Cloth. Pages 320. Price \$1.40. The Macmillan Company of Canada, Tomonto. The key-note to this thimely book on education is energy -how it may propenly be directod in the child's life and' in

School work; how the nervous enengy of the teacher and child may be adjusted and stored, and how mental tension and over stimulation may be avoided by aesthetic influences and wholesome recreations. Altogether it is a valuable book for the teacher or student who is tempted to do too much work.
An Elementary Logic. By"John Edward Russell, M.
A. Clothi Pages 250 . Price 75 cents. The Marmillan Company of Canada, Ltd., Toronto.
This book aims to present to young students, the essentia! principles of correat thinking. These principles are very clearly presented, and teachers will find it very advantageous to have such a concise treatment of this science, as is given in the volume.
High School Physical Science, Part II Revised edition. By F. W. Merchant, M. A. Principal, London, Ontario, Normal School. Cloth. Pages 290. Copp. Clark Company, Toronto.
This revised edition of what is evidently found to be a very useful school book, is designed to cover the courses in sound, light, magnetism and electricity prescribed for middle classes in preparatory schools and academies. The book is neatly printed, abundantly illustrated, and well adapted to interest pupils in experimental work in physical science. Theory and practice are very adequately combined. An index is given with answers to questions set in the text.
The Garden of Childhood. By Alice M. Chesterton. Cloth. Illustrated. Pages 174. Copp, Clark Company, Toronto.
A set of thirty prettily told, home-made stories, each of which is illustrated by one or more pictures. They are issued by the Moral Instruction League, London, and are designed for the amusement and instruction of children in primary schools.
Dickens' A Tale of Two Cities and Longfellow's Tales of A Wayside InN. Cloth. Price 25 cents each. The Macmilian Company of Canada, Ltd., Toronto.
These volumes are printed in a convenient and handsome form in Macmillan's Pocket English and American

# THE EDUCATIONAL INSTITUTE OF NEW BRUNSWICK Will meet at Chatham, N. B., 

ON

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#### Abstract

An interesting and instructive programme is being arranged. Addresses will be given by leading educationists and public men.

The Executive Committee will meet at 9.00 a. m. on Wednesday, the ${ }^{2} 7$ th, and tho Institute will open in full seasion at $10.30 \mathrm{a} . \mathrm{m}$. of that day

Arrangements for reduced fares will be made with the railways and the steamboat lines. In order to secure a free return, Teachers should obtain, when purchasing a tieket, a STANDARD CERTIFICATE, duly filled in by the Tieket Agent. of each line of railway travelled over.

All onquiries as to accommodations, or special arrangements as to entertainment at Chatham, shnuld be addressed to Dr. Philip Cox, the Chairman of the Local Committee.


JOHN BRITTAIN, Secretary Institute.

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classics. They montuain introductory sketches of the authon, a criticism of the books nomed above, with notes and indexes.
The Physical. Nature of the Chmo, and hoon to study it. By Stuart H. Rowe, Ph. D. Cloth. Pages 211. Price \$1. Tine Macmillan Company of Canada Ltd., Toronto.
This book is valuable not only for normal schools and wolleges, but for reachers and parents who are seeking for fulder information in the direction of chiddren umber their care, especially those requiring peculiar treatment.

## Recent Nagazines.

The Chautauquan for June is a special number on civics, in which, by a series of popers, attention is called to the betterment of conditions in the social and iotellectual life of the citizen.

The Atlantic Monthly for May has a remarkable papar by John Burroughs in his best vein, entitled Camping with President Roasevelt, presenting one of the most intinnate pen portraits of the President, that has been written. There are other essays of great interest, includingr one on Froude, by Goldwin Smith. There is a gromp of speciality
srotable stories. and there are tho fine poems, one ty Bliss Carman, and the other by Richand Watson Gilder.

Twenty-two persons contributed to the varied table of contents in the May Canadian Magazine. Stories, sketohes, pooms, sporting articles, bits of bistory and more serious material make up the menu. Hanolld Sands recalls the fact that Simon Fraser statted in May, 1805, for the explonation of the unknown district now known as British Columbia, nence the title of his anticle, One Hundred Years in Britisl1 Columbia. F. Blake Crofton writes of the imperialism of Ilaliburton and Howe-two of the most wonderfurl of Canardian publicrists. Mr. J. E. B. MeCready, a veteran joumalist, begins a seties of reminiscences of the first Dominion Parliament.

The April mumber of Acadicnsis, publishod at St. John by Mr. D. R. Jack, is as interesting magazine. It opens with a pituresque article on the History of Misoou, by Pnofessor W. F. Ganong. The edvitor, D. R. Jack, contributes three.excellent essays, atnd Professor MaoMechan of Dallhousie University wnites an insteresting inistorioal sketch entitlod Halifax in Books.
The weekly numbers of Littell's Living Age for May contain subjects of çurrent interest in international affairs, -the comference at Algeciras, the Humgrian compromise, the English education bill, the Russian ellections,

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## The Portraits

Sent by the Review for Empire Day, to all subscribers who are paid in advance, are now entirely exhausted, A fow

## Canadian History Leaflets

suitabla for school Suplementary Readings are still on hand and will be sold at HALF PRICE, namels.

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the relations of Canada and the United Sitates, etc., all ably treated in articles which The Living Age reprints from the Spectator, Economist, Suturday Review and other organs of Enrglish opinion.
The June Delineator is a most attractive number, containing the usual array of the latest sty!es and diterary features of great excellence. Gustav Kolbé interestingly tells the story of Home, Sweet Home, and there is a vaniety of excelelnt verse. For whildren, there are Stories and Pastimes, among them one of Alice Brown's Gradual Fairy Tales, and for the woman of the home, many articles of house wifely interest.

In the June Atlantic there are timely and vigorous discussions on national interests; science is represented by Professor Sec's account of Recent Solar Research and other articles; literature has several clever and delightfully written essays including Julian Hawthorne's English Lawns and Literary Folk; and there are bright stories and poems, anticipating the lighter literature of the summer months.

The Junc Canadian Magazine has articles of much interest, among which are Professor Coleman's (Toronto) on Earthquakes and Volcanic Eruptions, and Frederick Dolman's on Sir John Millais' art and art methods. The stories of the June number are exceptionally good.

## EDUCATION DEPARTMENT- NEW BRUNSWICK.

## OFFICIAL NOTICE.

## Departmental Examinations, 1906.

(a) The High School Entrance Examinations will begin at all Grammar and Superior Sohools on Monday, June 18th.
At these examinations the Lieutenant-Governor's Medals are to be competed for, in acoondance nwith instructions issued from the Education Office.
(b) The Normal School Closing Examinatians for License and for Advance of Class will be held at the Normal School, Frederiatont, and at the Grammar School buildings, Chatham and St. John, beginning of Tuesday, June 12th, at nine oiclock, a. m.
(c) The Normal School Entrance Examinations and Preliminary Examinations for Adrance of Class, the High School Leaving Examinations and the University Matriculation Examinations will be theld at the usual stations throughout the Prowince, beginning at mine oclock a. m. on Tuesday, July 3nd.

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Examimations for Superior Sahrool Lionnse will be held borh at the June and July examinations.

For further details in regard to the Departmental Examinations, see Sohool Manual, Regulations 31, 32, 45 and $4^{6 .}$

## Close of Term.

The numliker of Teaching Days in present Term is 121 , except in the City of Saint John where the mumber is 120 . The last teaching day of the Term is Friday, Junte 20th; but teachens who attend che Provincial Institute at Chatham may slose their schools in time to reach Chratham on Wednesday, June 27th.

The First Teaching Day of the next Term will be Monday, Auggust 13th, except ins Districts haming eight weeks' summer vacation in which Districts the schoo's wild open August 27 th.

## School Manual.

'A new Edition of the Solmool Mamal omtaining asil amendments made to the School Act up to date (inchudingy the Compulsory Attendance Act, passed at the last seswion of the Legislature) will be published during the summer vacation and mailed to Trustees and Teachers.

Manual Training Courses. rgo6-7.
Training courses for teachers desirous of qualifying as dicensed Mamual Training irstructors will be lockd at the Provincial Normal School during the session of 1906 -7 as follows:

Elcmentary Course.-September 18 to December 21, 1906.

Adzanced C"aursi:-Jatuary 8 to June 21, 1907.
The elementary counse is intended to qualify teaciners for the biconse to teach Mannad Training in rumal sthools. Candidates for admission must holld at least a second aluss Provincial dicense, and be prepared to furmish evidence of their teaching abi"ity.
The advanced course is intended to qualify teachers for the license to teadr Manual Training in town sciboots. Cardickates for admission should hold a first class liceruse, but teachers hoiding a scoond class điomse, and having a good teaching record, may be admitted on their merits.
In each course. students showing little aptitude for the work will be advised to discontintue at the end of one month from the date of entrance.

Tuition is free, and tive usuad trave!ling allowance made to Normal students will be given to teachers who complete their course and proceed to the teadning of the subject in the Public Schools of the Province.

## Household Science.

No provision exists at present in the Normal Sudhool for the training of Household Science teaciners, but certain institutions have been apploved by the board of Education as training places for New Brunswick teachers desiring to qualify as licensed teachers of the subject.
Full particulars of the several courses outlined alinve may be obtained from the Director of Manual Training, T. 13. Kidner, Fredericton.
J. R. Inch,

Chief Supcrintendent of Education.
Education Office, May 25 th, 1906.

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Educational Review $\mathfrak{F u p p l e m e n t}$, Flugust, 1906.


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The Edecational Revew is always continued to subscribers until a notice to discontinue is received. This is the fairest way; as nearly all our subscribers expect the Review to be sent to them even after their year has expired, the understanding being that they will remit at the first convenient opportunity. But subscribers should not allow themselves to become relinquents and to be dunned. Dunning is expensive in the matter of time and postage.

The present number of the Review will prove a welcome visitor to the hundreds of teachers who will read its pages previons to entering on their work for a new term, and we hope to make every future number stimulating and helpful. We wish our subscribers a happy and profitable year's work.

The teacher of few words-what a blessing she would be to some schools! The chattering teacher is the creaking hinge of the school, and the mischief of it is she keeps a-going constantly. Shattered nerves? No wonder.

Dr. W. T. Harris, probably the best known edtcationist on this continent, has resigned the office of United States Commissioner of Education, which he has filled acceptably for the past seventcen years. His valuable reports, covering one or more large volumes cach year, are veritable mines of information, while his writings on the philosophy of education have given him a world-wide reputation.

Do you intend to make your school premises and your surroundings better and more fully equipped at the cud of the year than you found them at the beginning: If so, that will convince the trustees that you are the right man or woman to teach their school; and this will do more to solve the questions of permanency and better salaries for teachers than acres of foolscap covered with the most ingenious and convincing arguments.
"My boy does not have to work," said a mother a few days ago. Poor boy! We are not surprised that the remark was made in a police court where the boy had been arraigned for some petty offence. One of the worst things that can happen to a boy is to be taught that he does not need to work. What did God give a boy hands for, but to use in some right endeavor? For what was his brain given but to be employed in something useful? If kind fortune has blessed the boy with plenty, he will have the more with which to help others and make limself a blessing. But to pernit a lad to grow up in idleness becanse he "does not have to work" is a good start toward the workhouse. It is the suicirle of character and the creation of a nuisance. Idleness is the ruin of any life. Blessed is the boy who has to work. He has a future. The world will respect him, and, if he be faithful, will crown him by-and-by.-United Presbytcrian.

## The Meadow's Changes.

Who says the meadow is monotonous? There is no place so quickly transformed as the meadow. Every passing cloud trails its shadows across its surface, and every breeze tosses its drapery into billowy motion. Every season leaves its individual imprint. With the fall of the water, while the grasses are passing through all the shades of gray, blue, and green in their hurry to overtake the up-land-the bog bean covers its spikes with feathery: bloom. Little mounds of sweet gale and patches of royal fern add a touch of russet in response to the call of spring. Soon the gray and blue and russet take on as many shades of green, and at the fading of the bog bean the graceful arrow-head shoots up its glossy spears and opens its wax-like flowers. Then the whole meadow reflects the sky in the blue of the "flag flower prankt in white." When summer is at its height the little pale blue-bell and a whole horde of diminntive beauties struggle in the waving grasses to welcome the coming of their queen-the meadow lily. The perfume of the purple fringed orchid lures us to its hiding place ont the outskirts of the thicket where the rose and meadowrue are rioting.

Then comes the scent of new-mown lay, and we hasten to gather the nodding white cotton-grasses. Far out on the river bank the sedges are ripening and will soon be white-for Autumn is here, with its plumes of golden-rod and asters-blue and white. The thicket is holding a carnival of color. Red apples are glowing on the thorn, tempting the robins and other thrushes. The high-bush cranberry is bending under the weight of its scarlet clusters. The wax-like beads are reddening on the leafy stems of the Canadian holly, while underneath the ground is carpeted with the bronze and gold of the faling fern and graceful fronds of meadow-rue.

Again the water begins to creep over the fading grasses and soon the "curtain of snow will cover all with its white echoless silence."

Inglesibe:

We have received a copy of "Our Jableerwock," a sixpemy monthly magazine for bors and girls. published by the League of the Empire. London. It is full of good things-healthy stories, short plays. articles on birds and beasts. and much other matter of interest to young people.

## Provincial Educationai Institute at Chatham.

The New Brunswick Educational Institute for 1906 was held at Chatham, opening on Wednesday morning, June 27 th, and closing Friday afternoon, June 29th. There was a strong representation from the eastern counties of the province, as well as from St. Joln, Fredericton, St. Stephen, Woodstock and other centres. The hotels at Chatham were taxed to their utmost to provide accommodation, and many private houses were opened to visitors through the attention of Dr. and Mrs. Cox and the committee assisting them. The sessions and public meeting were held in the large hall of the fine high sclool building, of which the townspeople of Chatham are justly proud. The weather was warm and pleasant; and the many beautiful lawns and shade-trees through the town, in their early summer verdure, were a delight to the visitors. The excursion on the Miramichi river will not soon be forgotten, nor the kind hospitality of Lt.-Governor Snowball, to whom the members of the institute are indebted for a most pleasant afternoon spent on that noble river. Premier Tweedie was a frequent attendant at the meetings, and Mrs. Tweedie, at the close of the institute. entertained the members at an informal and delightful garden party. The Premier also placed his stenographer and long distance telephone at the disposal of the members of the institute, a courtesy that was much appreciated.
The absence of Dr. John Brittain, the secretary, through illness, was very generally regretted. Principal Hamilton and Miss Milligan, of St. John, his assistant, attended efficiently to all the duties of that office.

It was appropriate to send to the British Columbia Teachers' Institute, meeting at Victoria, at the far west of Canada, a telegraphic greeting, which was cordially acknowledged by that body on the following day.

Dr. Inch presided in his usual dignified and efficient manner. In his opening address the referred to salaries of teachers, claiming that the average had increased in this province during the last few years from ten to twenty per cent. He quoted from a letter from Inspector Merserean to show that while salaries were higher in the western prairie provinces, there were fewer comforts, and the cost of living there was ligher.

Premier Tweedie, in his address at the public meeting, hoped that before lie laid down the seals of office lis government would increase the salaries. and provide a scheme of pensions for teachers.

Mr. E. W. Pearson, director of music in the public schools of Philadelphia, gave an address on the teaching of singing, which was greatly appreciated. He held that to nake this successful a definite course on the movable do staff notation is necessary, and that the grade teacher, with good supervision, is the only one who can accomplish this. He gave a large number of instances in which it hat been donc, taking but twelve minutes a day, and answered satisfactorily a variety of possible objections. At periods of the institute where opportunity offered, he instructed classes in the elements of singing with the greatest interest to all. His enthusiasm and confidence in his method were catching.

Inspector Pridges and Miss Mary McCartly, director of music in the Moncton schools, followed his address with strong arguments in favor of music teaching in the schools, and commendation of Mr . Pearson's method.

Miss Adla E. Smith, of New London, Connecticut, gave two excellent addresses on geograply teaching; Dr. Cox spoke on the Transfer of Latin and Algehra to Grade IX: Professor Locliheal, of Mactonald College, on Educational Unrest: Principal ITamilton, on the Decoration of Schonl Grounds and School-rooms: and Dr. H. S. Bridges on Some Phases of Modern Education.

Dr. Cox's address brought out a lively discussion. He was strongly supported ly Inspector Carter, who held that manual training. dourestic science and commercial suhjects belonged to grades seven and cight. and that to make room for these Latin and algebra should be relegated to the ligh school, as had been done a few years ago in the case of geometry. Dr. Bridges, Inspector Bridges, Mr. Myles, Principal Owens. Principal Foster and others opposed this unless the high school course was lengthened to four years.

Professor Lochhead maintained that the introduction of nature-stude in the school curriculums, as at present constituted, was onlv partially successful. To realize its greatest possible benefit the course of study would have to be revolutionized.

Principal Hamilton made a strong argument on the educational value of decorating seheol-romes with re-prints of works of art, and the means these afforded for giving elementary instruction in art to children.

Dr. Bridges said it was dangerous to experiment with education. Old methols were preferable in many respects to new. IIe emplasized the importance of language studies, and thought there was mot now the intelligent mastery of 1 omks as in former days.

Principal Geo. J. Truenan, in his address before the high scloool section on the Admission to College on High School Certificates, presented a well-prepared argument in support of it. In the discussion which followed, many declared themselves opposed to more than one cxamination at the close of the high school course.

Col. S. U. McCully, in his paper on Military Training in the Public Schools, cmphasized the importance of that promptness, order, obedience and other qualities developed by a systematic military training.
H. H. Hagerman, in his talk on the metric system of weights and measures, gave suggestions for developing in pupils' minds practical ideas in regard to the system.

Dr. Philip Cox was unanimously elected representative to the Senate of the University of New Primswick, in place of H. H. Hagerman, M. A. Dr. Bridges, H. H. Hagerman, J. Frank Owens, Dr, Hay, George A. Inch, Dr. Cox, R. E. Estabrooks, I3. C. Fnster, E. W.' Lewis and Miss Ina Merscrean were elected members of the executive committee.

The text-book committee of 1904 was re-elected for two years: Miss Ammic Marvey, Dr. Bridlyes, S. W. Irons, F. O. Sullivan, Ti. C. Foster, Dr. Crocket and Inspector Carter.

The N. B. Teachers' Association met on the evening of the 28 th and re-electet the old officers and executive. The salary scliedlule at present in force was adopted for the coming year.

Two notewortly addresses at the pullic meeting no the cerening of the 27 th were those made by Rev. L. Guertin, D. D., of St. Joseph's Colfege, Nemramcook, and by Rev. Dr. Porden, of Mt. Allison.

In many weighlorhools there are places interesting from a historic point of view, and there are old people who can contribute much to the making of an accurate and a complete record of events. Now. why camnt the teacher, when he has reached ecrtain stages in the study of history. send members of the class to make maps of localities in which noteworthy things were done, and to collect from the oldest inhabibitants, and from all other sources. all facts which would be of value in the writing of history? The recorils so collected. with accompanying mass. eould be embodied in emmpositions, and slould be discussed, and, if necessary, revised in the elass. The teacher who follows the plan here suggested will be teaching the childten to go to original sources for history and gengraply, aud incidentalls to learn the value of accuracy and clearness in de-acription.-Western School Journal.

## Summer School at North Sydney.

The Summer School of Science for the Atlanic provinces met at North Sydney, Cape Breton, July 3 rd to $20 t h$. The visit there was one of unusual ' interest on accomit of the attractive scenery of the island and the great iron and coal industries carried on there. The Dominion Govermment steamer "Canada" was placed at the disposal of the school for two days, and excursions were made to Ingonish Harbor and to the Bras d'Or Lakes, touching at farfamed Baddeck. The members of the school will always entertain the kindliest feelings toward Capt. Knowlton, his officers and crew, for the many attentions received during these excursions. The opportunity was also given to see the historic city of Louisbourg, the scenery of the beautiful Mira river, the coal industries of Sydney Mines and Glace Bay, and the steel works at Whitney Pier. The visitors were impressed with the operations carried on at these places. No mere report could convey any adequate idea of their immensity. Every opportunity was taken advantage of by polite officials and attentive workmen to explain the intricacies of the manufacture of coal and iron with their by-products; and the visitors were satisfied with the great object lessons which every day aroused their wonder and curiosity.

To have seen the Lonisbourg of history, the picturesque and commodions harbour of Sydney, with its animated scencs by day and night, the attractions of Mira river and Bras d'Or Lakes; to inspect the workings of the Marconi telegraph system on board the "Camada" and to see the towers near Glace Bay ; to listen to the wierd stories of miners who work two miles out under the Atlantic and hear at night the dull thud of ships' anchors over their heads,-all these and many more new experiences were the lot of those who attended the Summer School at North Syduey. It is little wonder that, in a region like this, the larger classes were found out of doors instead of in the classrooms. But many students travelled far, and came for the sake of the regular work. These gladdened the hearts of the instructors and were pretty constant in their attendance.

I'resident Scaman and Scerctary Camploll were kept busy providing for the many meetings and engagements of thic schooi, and though their resources were often taxed to the utmost, they were equal to all occasions.
'The reception given by the ladies of North Syd-
ney and the many courtesies extended to the visitors were warmly appreciated.

The next meeting of the school will be at the new consolidated school at Riverside, N. B., on the invitation of ex-Governor McCleland.

Two governors, Licut.-Governor Fraser, of Nova Scotia, and Lieut.-Governor McKimnon, of P. E. Island, attended and spoke at the opening meeting of the school this year. They also took part in the excursion to Glace Bay and Louisbourg. Next year the school expects to have three lieutenantgovernors, at least, at the opening meeting.

The following are the officers for the coming year: Professor W. W. Andrews, president; J. E. Barteaux, vice-president for Nova Scotia; Dr. G. U. Hay, vice-president for New Branswick; Miss Guard, vice-president for P. E. Island; J. D. .Seaman, secretary-treasurer. P'rincipal McKittrick was elected to the board of directors in place of Dr. J. B. Hall, whose term had expired, and Principal Geo. J. Trueman was chosen local secretary at Riverside.

## Language.

Write the following in statements. Let pupils put their work on the board. Notice very carefully the spelling of each word. Have pupils make an oral statement about each word used. This can be made an excellent lesson for teaching one use of the comma:
I. Eight domestic animals: five persons. 2. Twenty wild animals; ten flowers. 3. Twelve garden vegetables: nine provinces. 4. Fifteen fruits; six countries. 5. Ten quadrupeds: four large rivers. 6. Twelve birds; five sour fruits. • 7 Ten minerals: four kinds of cake. 8. Six grains: six kinds of vehicles. 9 . Ten things seen on the way to school. Io. Ten things in the schoolroom: four books. II. Twelve farming implements; four fuels. 12. Six bad habits: six building materials. 13. Ten games; twelve musical instruments. 14. Five articles of clothing; four kinds of apples. 15. Ten kinds of cloth; five kinds of money. 16. Twenty trees; six things seen in the sky. i7: Ten houseliold articles; five kinds of windows. 18. Ten things bought at a hardware store. 19. Ten occupations; cight kinds of people. 20. Five kinds of snakes: cight languages.-E.rchangc.

You are to be congratulated on the Review's rapidly increasing uscfulness. Oụr teachers are now. more than ever, awakening to its value. It has heleed me wonderfully through many trying periods of school work.
W. A. T. !

## Our Rivers and Lakes.

Pruf. L. W. Baley, LL. D.

> No spell could stay the living tide Or charm the rushing stream. Leyden.

In the second chapter of this series "our coasts" were considered, and in that which followed it, "our mountains and hills." These are comnected with each other through "our lakes and rivers," which are equally full of interest and instruction.

Mountains, rivers and the sea are three connected parts of the earth's distillatory apparatus. From the waters of the coast comes the supply of moisture which, driven by the winds, falls as rain or snow, especially where these winds, by blowing over clevated land, have their temperature reduced. It is the sun which lifts the waters into the air, thus giving then what the physicists call "energy of position:" the hills and monntains are the condensers which cause the air to drop its load; it is gravity which causes the precipitated waters to flow back to the source from which they came, at the same time enabling them, by the energy set free, not merely to float our humber and turn our water wheels, but also to cut into and to carve, more or less deeply, the surfaces over which they flow.
There are few natural phenomena more interesting than those comected with running water. They give to natural scenery a beanty which we never fail to miss when they are absent. They are the most life-like of all natural processes, and, taken together. illustrate a history, ever varying in detail, which if we choose to follow it out, shows the most singular parallels with that of human beings. Thus at tiver has its birth, in the womb of mother earth; it has its infancy, claaracterized merely as a time of gathering strength; its jouth, impectuous, noisy and headstrong, defying all obstacles, not easily turned aside, carving its way with but few intervals of rest; its maturity, when, its work mostly done, it moves slowly and majestically upon its determined way"; its period of old age, when, having reached the sea level and lost the energy which it at one time had, it no longer works, but drops its loal. assumiing now the appearance of a calin repose. It may' even have its second childhood, when, through the elevation of the region which it traverses, its power of loing work is for a time again renewef. Streams, like men. have also their conflicts and adventures, their struggles for existence. followed by survival or extinction, as they may or may not be "able to adapt' themselves to changed eonditions. Fínally they máy, in a sense, be not only dead, but
" buried," as has happened with many of the rivers of America.
Let us now see how far these parallels find illustration in connection with the rivers of Acadia.
Few countrics are more thoroughly watered than the province of New Brunswick. Travel where you will within its borders and you are never very far from a water course. Take a good map of the province and you will find that, like the arteries and veins of the bodly, streams, large or small, traverse every portion of its area. Of these, about four hundred miles are navigable by steam, at least an equal amount in addition is navigable by canoe, and an almost indefinite number are large enough to he available for the driving of lumber. Comected with these are numerous lakes, more than forty of them exceeding a mile in length, and, where not in close proximity to settlements, abounding with fish and game, offering great attractions to the sportsman and tourist. Cascades also are mumerons, affording great and widespread opportunities for the employment of water power in manufacturing operations or the development of electricity.

In Nova Scotia, owing largely to its more limitel extent, no point being more than fifty miles distant from the sea, the streams, though numerous, are less important. The lakes, also, though very albundant, are usually of small size and little depth.

If now we attempt to institute a comparison between the rivers of Acallia-a most fascinating study, especially if based upon personal acquaintance and exploration-we shall first have to consider the places and circumstances of their birth. These are naturally, for the most part, remote from settlements, being upon the higher grounds constituting the "divides" between the natural slopes of the surface, and often densely forest clad. They will also be found, in the great majority of instances, to originate in lakes or ponds. These are gathering grounds for more or less considerable areas, and, in addition to brooks or rivulets, are themselves fed, like the latter, by springs. the discharges of which, owing to the coolness of the waters, are always sought by sportsmen as affording the best opporthnities for fishing. These springs are occasionally of large dimensions, one, at the head of the Tobique lakes, being especially remarkable, covering an :trea of nearly half an acre. with water of exceptional clearness and purity, and a temperature whicls, even in midsummer, is not more than $+2^{\circ}$. On the other hand. where streams originate from or pass through bogey land, they are apt to have the dark colomir
and swampy taste due to the vegetable acids usually produced in such situations.

From the origin or birth of our water-ways we now proceed to consider their history and develonment. It has been stated above that rivers have their periods of growth, maturity and old agc. How, we may now ask, are we to distinguish between a young and a mature or old river? Well a stream is young, in the sense which is here implied, when it still las the greater part of its work before it, that work being the making and deepening of its channel; it is old if that work is nearly done. Young rivers are usually swift, broken by rapils and falls, with their channels narrow and often bordered by rocky bluffs; old rivers are characterized by broad and open valleys, moderately flowing currents, with muncrous islands, and more or less extensive flood grounds. Naturally their coutse will at first be determined by the position of the divides and the steepness of the slopes or watersheds; but if, with the aid of a good map, we try to trace them out, we are soon struck by the fact that while the minor streams evidently flow off, like rain on a roof, along existing slopes, or occupy valleys betwee: enclosing hills, the larger ones in many instances cut directly across the latter as thongh they had been but little inflence: by the irregularities of the present surface. Thus one of the principal tributaries of the St. John, viz., the St. Francis, starts froan Lake St. Francis, hardly ten miles distant from tise great St. Lawrence, and on the northern side of the great divide or "Height of Land" separating the Province of Quebee from that of New Brunswick, and yet, instead of emptying. as one would expect. into that river, cuts through at high range of hills to join the St. Jolm, and then the combined waters of these and other tributary streams, still apparently unaffected by the obstacles in their way, turning southward traverse at least four other great axes of elevation to discharge into the Bay of Fundy. Only one explanation of this anomaly, shared with the St. John by the St. Croix and the Magagatavic, as well as by the Itulson and the I'otomac, is that the rivers are, in part at least, older than the hills; that these have risen athwart their path, but that, like men. having once "gotten into a groove," they could not well get out of it, and so, ats the hills rose, have simply cut their grooves more and more decply. That they are still at this work slows that they are. i:1 part at least, still young.

To make this and some other prints in connec-
tion witl our rivers more clear, it is now necessary to say that at a period but little, if at all antecedent, to man's first appearance upon, the earth-a period known to geologists as the Glacial Period-all this portion of America was, as generally believed, in a condition similar to that of Greenland to-day, i. c., deeply buried beneath a continental or scmi-continental glacier, even our highest hills being covered by hundreds, if not thousands of feet; of snow and ice. This great ice mass, too, was, as in the case of Greenland. " on the move," and therefore, as well exhibited both in that country and in Switzerland, in a condition to deeply abrade the surface on which it rested, ploughing deeply wherever the conditions were favorable, breaking off projected ledges, taking large quantitics of rock material into its mass, transporting this to considerable distances, or pushing it in front of its advancing foot, there to remain, when the glacier finally melted away. Such accumulations of ice-transported rock material are in Switzerland. known as " moraines," and, as will be shown in a later chapter, are common over many parts of New Brunswick and Nova Scotia. Moreover, when the ice, through climatic changes, hegan to melt. the first formed streams, owing to the complete burial of the hills and valleys below, would be determined in their course, not by the latter, but by the ice-slopes above. Thus as ridges began to protrude, streams. fed by the melting ice, would have no difficulty in crossing them, at the same time determining a groove or "water-gap," which ever after they must follow. This is the explanation of the anomaly referred to above, and many of our rivers. or parts of them, are of glacial origin, produced when the land stood higher than now, and when, as a result of such elevation, both water and ice were far more effective agents of sculpture and removal than they ever since have been. But while many of our rivers, or some portions of them, were thus excavated, channels formed at that time, or previonsly existing, were in many instances obliterated, as the result of being completcly filled up by the debris of the glaciers, thus forcing the rivers at a later period to carve for themselves entirely new ones. Finally, as the land during the period of elevation was not only higher. but more extended than now, coastal regions which are now submerged being then a part of the dry land, the mouths of rivers emptying into the sea would have their mouths far outside of their present position, they: and their former chamels, in some instances for hundreds of miles. becoming buried or "drowned"
as the land, after the Glacial Period, sunk not only to the present level, but below it. A final but relatively slight upward movement brought things to the conditions in which we find them to-day, although, as stated in a previous chapter, there is reason to believe that these oscillations have not yet wholly ceased.

With these explanations we may, in a later chapter, return to the study of our existing streams.

## How One Woman Keeps Young.

How to keep young is one of the questions of perennial interest to the feminine mind. Amélie Rives, the noted author, who is said to look like a girl in her teens, recently told of her reply to a physician who wrote her to send him the secret of what he called her perpetual youth. "I wrote back that he must consider the cost," she said. "It is a cost that few of his fashionable patients would make, for I rise at 7 or 7.30 , ride or walk in the country roads, live close to my books, sce few people, and reire at 1o. What fashionable woman could endure my life? I remember thinking about it one winter morning, when I was walking along, the crisp, crackling snow under my feet, the fairy outline of a gossamer frost revealing every twig of bush and tree, and I was so invigorated and happy I could have whistled like a boy with delight; but if I had been a woman of fashion I couldn't have endured the silence, the empty distances, the quiet; why, a woman of fashion would die in my place, and I am quite stre that I should in hers."

## A Place for the Boys.

[^14]
## Art Notes -- VIII.

By Hunter Boyd.

## "The Order of Release," by Sir John Everett Miltals.

The reproduction selected for this month is from one oi the artist's best works, although it is not so well known as many of his other paintings. The original is dated 1853, and was exhibited in the Royal Academy of Arts in that year. It is now in the Fate collection of the National Gallery. When first shown the pieture evoked much interest, indeed policemen were required to regulate the crowds who thronged about it. The price given for works of art is not always a fair indication of value, but many will be impressed on learning that Sir Henry Tate, the last purchaser, gave $\$ 25,000.00$ for it, and then presented the pieture to the British nation. It is an oil painting on canvas, $3^{1 / 2} \mathrm{ft}$. by $21 / 2 \mathrm{ft}$., and therefore the figures are less; than life-size. They are, however, rendered with extreme care, and in the judgment of one eminent critic, as a piece of realistic painting, it may challenge comparison with anything else in the world.

The artist introduces us to a scene which belongs to a period a hundred years before the time when he clepicted it. We are supposed to be in the anteroom, or waiting-room, of a gaol, situated near the bonder of England and Scotland, possibly in the town of Carlisle. A prisoner who has been in the rebelion of 1745 is seen wearing a kilt of the Gordoas tartan, his right arm being in a white sling. His head falls upon his wife's shoulder, and his left arm embraces lier and his child. The wife has procured an "order of release," and is handing it to the gaoler who stands in the doorway, and it will be necessary for him to take the "order" to his superior officer for verification before the prisoner can be released. The little child is asleep, but the collic who jumps up and fawns upon his master is intensely atwake. A feature to be noted witls special interest in the hands of all the persons, for Millais devoted special care to their treatment; and as emotional expression is not confined to features, we have here a grood instance of accord between faces and hands in the working out of this little drama. We camot expect to get very subte details in a black-and-white copy of the pieture, but the general bearing of the woman leads us to expect that whilst she displays an air of trimph, and some indication of contempt for the gater, there is also love for her husband, and a certanty that he will soon bo. at liberty.

The test that may properly be suggested in dealing with this scene is-if such an event ever took place, is it likely that the occurrence was as Millais has depicted it? We believe so for several reasons. The artist has been scrupulonsly careful in his'reproduction of uniforms and textures. The "order" was painted from a genuine one. Special pains were taken in the treatment of the collie dog, and the little child was actually asleep when Millais seized the expression. (The woman who posed for the picture afterwards became the second wife of the artist). The actors in this silent drama have all entered so thoroughly into the situation, and Millais has so truthfully rendered it, that we are helped to an appreciation of the feelings which prevailed between the Scotch and English in 1745, as symbolized by the "good wife" with her order for pardon, and the turnkey with his bunch of keys. Such are the facts concerning the picture. Thie teacher should hold them all in reserve, and endeavor to secure conversation on the subject. In the - junior classes the interest will probably centre about the little child, the dog, the broken arm of the man, and the strewed primroses. In intermediate classes, where British history has been studied, the picture will be of use in illustrating the costumes worn at that period. In the senior classes special attention may be drawn to the composition of the central group, and it will be found that affection makes them a unit.

Professor Blackic used to form a very picturesque feature in the Edinburgh streets. He was a cheery old patriarch, with handsome features and hair falling in ringlets about his shoulders. No one who had seen him could possibly forget him.

One day he was accosted by a very dirty little bootblack, with his "Shine your boots, sir?"

Blackie was impressed with the filthiness of the boy's face.
" I don't want a shince, my lad," said he. "But if gou'll go and wash your face I'll give you a sixpence."
"A' richt, sir," was the lad's reply. Then he went over to a neighboring fountain and made his ablutions. Returning he held ont his hand for the money.
"Well, my lad," said the professor, "yout lave earned your sixpence. Here it is.
" I dimna want it, auld chap," returned the boy. with a lordly air. "Je can keep it and get yer hair cut."-Tit-Bits.

## Barye, the Sculptor.

Miss A. Maclean.

Antoine Louis Barye (bä-ree) was born in Paris, September 15 th, 1796 . His father was a goldsmith. His fanily preserve as souvenirs of his earliest childhood figures of 'animals which he cut out of paper. In 1819 Barye received third prize for a medallion from the Ecole des Beaux Arts. The following year he won second prize in sculpture For four succeeding years he competed unsuccessfully, 'and in 1824 his work was not even admitted. So he abandoned the beaux arts and returned to his craft, and for years set himself quietly, deter: minedly, to master his art. Nothing was neglected; he drew from the living model, he familiarized himself by observation and dissection with the physical structure of man and animal, he informed himse!f thoroughly about the best methods of melting and casting metals, he copied in the Louvre the works of the masters. But the Jardin des Plantes was his greatest studio then and throughout his lifc. In the garden the animals are to be seen in their cages; in the muscum of zoology they are found stuffed; and in the museum of comparative anatomy are their skeletons. This was the day of the Cuviers: Frederic, the younger, became curator of the menagerie in 1804.

After years spent in study, Barye made his first salon exhibit in 1827 , a sculptured "Tiger Devouring a Crocodile." This work created great enthusiasm among the new school. Hitherto no one had thought of actually studying animals from life. The academic school was constrained to award him a medal of the second class. But powerful as this work was, Barye had not yet attained to maturity in his art. In the Salon of 1833 Barye exhibited ten works of sculpture, the most notable being the "Lion and Serpent." It produced even greater enthusiasm than the "Tiger and Crocodile." Very soon the enthusiasm gave place to anger among the academic sculptors. Barye, however, was decorated with the Legion of Honor, and the lion was purchased by the state and placed in the garden of the Tuilerics. Someone says the lion lives, and if you wait long enough you will hear the deep growl as he shrinks in loathing from the serpent he is about to kill. Still there was too much detail in Barye's work-he had not yet reached grandeur. The years that followed till 1837 were busy and prosperons. Thiers was minister from 1832 till 1836 , and wished some great work to commemorate Napoleon I. The inspiring hope of decorating the entire Place de la

Concorde was held out to Baryc. But finally it was resolved to have an cagle with seventy feet span of wings descending upon the Arc de Triomphe, clutching in its talons trophies symbolizing the cities and nations conquered by Napoleon. Alas for France that none of these were carried out, and that she gave not her geniuses work worthy of them. The jury of thirty-six proceeded to treat Barye as they had treated Millet, Roussean and others. His bronzes were refused. He interpreted this as an order to submit to academic ideas or cease to compete, and did not again compete till 1850, when the old jury was swept away with the monarchy. In 1840 he completed the lion, which is walking about the base of the Bastille column. This was another milestone in the onward march of the great sculptor. The lion is pacing with slow measured steps about the base of the pillar, breathing low growls as he goes. Charles Blane says of this lion, "It is the image of the people guarding their dead."

But Barye had begun answering the action of the Salon of 1837 by making himself a manufacturer, hiring skilled labor and selling his products. These consisted principally of small statues of animals and birds. But oh, the folly of it! The folly of France! There stood one who could have done for Paris what the masters of Greek art had done for Athens, and they let him waste his time in making Lilliputians for a living. He did not neglect grand art altogether, however. The "Thesens and Minotaur" belong to grand art, and in 1847 he finished the "Sitting Lion." This was his first public answer in monmmental work to the closing of the Salon doors, and the answer was at complete one. Here all details are effaced. The lion, grand, calm, terrible in his conscious might, sits there on his throne looking towards the ends of the earth. The state purchased it and placed it near one of the entrances to the Louvre.

Eighteen hundred and forty-cight came, and with it the revolution; the Salon was no longer closed, and the artists of the new school got their chance. Barye was himself made one of the judges. IIe re-entered the Salon of 1850 with the "Centaur and Lafrith" and the "Jaguar and Hare." Both are now in the Louvre. The Centaur is grand, but the Jaguar-such strength, such savagery, such supple-ness!-you can feel its muscles slip under its bromze skin. It is not an individual, but a type-this is genius, immortality. Sarye bad attained maturityin art. The Jaguar was purchased in 1852 by the Imperial House, and Barye was named professor of
drawing and zoology at the Musemn of Natural History, a position he held until his death. At the World's Exposition of 1855 the international jury awarded him the grand medal of honor in the section of art bronzes, and he was mamed officer of the Legion of Honor. In 1868 he was elected to the Academy of Beanx Arts.

Sylvester, Barye's friend, describes him at the zenith of his power: "He is of supple figure and above middle height, his dress is modest and careful, his bearing and gestures are precise, tranquil, wortly. His eyes, vigilant, firm, look you always frankly, profoundly in the face. He listens to you with patience, and divines your thoughts. All his words hit the mark, but they scem to come with effort from his thin, strong lips, for with him silence is virtue. He follows the maxim, ' It is better to be than to appear.' He has never taken an ambitions step, never spoken a servile word, never cherished a jealous thought, being ever ready to give full credit to others. I do not know a contemporary more ready than he to hear what is true and exalt what is beatiful. A man convinced of his own worth, without vanity, solid in his affections, despising his enemies to the point of forgetting them, charitable toward others, severe toward himself." Corot and others, who knew hin well, found him an interesting talker and critic, the mute reserved man becoming full of animation and sparkle. He was married twice. His first wife and their two danghters died, and he married again and had eight children. He seemed to have loved his home and family, but of his domestic life little is known. lle painted as well as sculptured, and it was when prainting backgrounds for his amimals in the forest of Fontaincblean that he was most associated with his Barbizon fellow artists. He knew the wild animals of Fontaincblean well, and in the rocky gorges of the forest he imaginel the Indian jungles and African wilds.
Heart disease kept him to his chair at last, and Corot's death was kept a secret from him. One day, toward his last, Madame Barye was dusting some bronzes, and remarked that when he felt better he ought to see that his signature on the bronzes be mate phainer. He replicet, "Give yourself no uneasiness, twenty years hence they will be searching for it with a magnifying glass."

The calm, determined, kindly man, one of the xreatest geminses of any lame ceased from his labors on Jme 25th. 1875. Framee momined her gifted son, but she was not wise in time.

## A Book Worth Reading.

## To the Editor of Educational Review:

Dear Sir,-This is an age of school libraries. Books, many and varied, much used and little used, are found on the shelves. I wish to make mention of one, which seems to me should have a special shelf to itself in the centre of constant use. In the carefully prepared lists issued from which to make selections for the schools, there is a title I do not remember secing, i. c., "The Opal Sea." Permit me to recommend this charming piece of literature to teachers and pupils of our public schools. Its value lies in its novelty of idea, beanty of style, coloring of thought and scientific information. A better and clearer explanation of the tides is given in a few words than it was ever my fortune to hear, even after repeated requests, in lengthy lectures at our normal school. Life inanimate (winds, etc.) and animate, above and below the surface of the sca, is clearly and almost poetically described.

I hope that these few words may draw the attention of those interested in such subjects. The author is John C. Van Dyke. The book first appeared March, 1906, and is published by Scribner's, New York, at $\$ 1.50$.

Sincerely yours, A. W. L. Smith. Halifax, N. S., June 30, 1906.

## The Language Box.

Keep a little box, with a slit in the cover, on your desk. Give to each pupil some small slips of paper, on which they are to write every incorrect expression heard at recess, on the playground, or when they are not at school, if you wish to break up bad habits as quickly as possible. The slips are to be dropped into the box, some time during the day. The language lessons are heard, in this case, late in the school day. At that time the box is opened, the slips read by the teacher, and corrected by the class.-Normal Instructor.

The teacher of grammar and rhetoric wrote a sentence on the blackboard, and then called upon William.
"John can ride the horse if he wants to." reat the teacher. "Re-write the sentence in another form."

William surveyed it dubionsly for a monent: then a hash of inspiration showerl him his path.
"John can ride the horse if the horse wants him to," he wrote.-Youth's Companion.

## The Teaching of Elementary Geometry.

By M. R. Tuttle.

Great improvements have been made in the teaching of this important subject within recent years. In former years the whole of the first book of Enclid would be gone througlr with before any original exercises were given. Many would learn the propositions verbatim, so that nearly all of its educational value was lost. With the introduction, at an early stage of their progress, of exercises to be worked by the scholars' own ingenuity, a great improvement was made. Intuition, imagination, conception and reason were more strongly developed. The further great changes that have recently been made are in line with the trend of modern education. The new education demands the practical. It re-cuforces reason by appeals to the senses. It is objective before being subjective. What, then, are the recent reforms in geometrical teaching?

Mechanical drawing is introduced at a very early period of the pupils' course, in fact abont as soon as he enters school; so, if his geometrical education is thus carried on from the first in connection with drawing and modelling, geometry proper might be commenced in the sixth or seventh grade. This would give a course of two or three years before undertaking deductive geometry in the high school. It would include such exercises as the measurement of angles and areas, by the use of instruments, the arriving at geometrical truths by the inductive method of drawing and modelling, the measurement of lucights and distances.

This method would have the advantage of putting his knowledge to a practical use from the very beginning. He would be learning to do by doing from the first. Sometimes a boy of poor reasoning ability is skilful in the use of the powers that call into play the motor activities. These boys, by this method, would be encouraged, and thus led on to the more rigorous demonstrations of later years. Nor should this practical geometry be abandoned in the high school. So important is it that the Mathematical Association of Great Britain, the successors of the Association for the Improvement of Geometrical Teaching. as well as the various works on clementary geometry that have recently appeared, all agree that it should be continued after deductive geometry; has been begun. Taught in this manner, geometry is an aid to arithmetn
is aided by it, in turn. It is also an invaluable adjunct to mannal training.

There is an adninable work on the subject which
has recently appeared, and which was reviewed in a late-number of the Educational Review, "Mechanical Drawing," by S. A.- Morton, M. A., Halifax, N. S. It might be well to use this work as an introduction to, and in connection with, the texts in geometry at present in use in the schools of the Atlantic provinces. Nevertheless, there are series by the same author which combine both the inductive and deductive elements, either in one book or in two. One of this character would perlaps form a safer guide for teachers who are just entering the profession. Take, for instance, "The Elements of Geometry;" by Lachlan and Fletcher, London, Edward Arnoll. Would it not be a good plan for our textbook committee of the N. B. Provincial Educational institute to suggest a good work? At present the subject is on the N. B. coarse of study, but the scheme needs elaborating. I have no doubt this scheme will have the sympathy and co-operation of the Provincial Normal School. We might ask them to set every year-some questions on the subject for the entrance examinations.

A Hint to Teachers.-A little girl sat listening to a poem. Her mother stopped frequently to explain and simplify: After quictly submitting for a time the little one said: " Mother, dear, I could understand so much better if you woukd please not explain."

[^15]-Eduein Arnold.

## Something for a Lazy Afternoon.

It was a hot afternoon in August. The glowing sun sent its scorching rays on the roof and sides of the little white rural schoothouse which was muprotected by even a tree. In the schoolroon it seemed too hot to breathe, and the nincteen restless pupils, varying in age from five to sixteen, were lounging in their seats. As I tapped the bell for afternoon recess, and as the children filed listlessly past me, I realized that the ianguage lesson on coal which I had planned for the last hour would be an utter failure.
Some interesting work must be given the chitdren, something that would canse then to forget the heat; but when the children had taken their seats my heart sank with despair, for I was myself too tired to originate any instructive occupation.

Suddenly I had an inspiration. One class was studying map drawing by scale. Giving to the three little folks some colored shoe pegs for work in stick laying, I sent the rest of the pupils to the board with their rulers. Who ever saw a child who did not like to draw on a board? I had cach chitd meature off at two foot space, and we called it a meadow. I then asked each to draw a picture of a tree, and we would sec if any one coukd tell what tree was represented. How hard they thought! As I watched the trees grow on the bard, some looking as if a west wind had broken them, and others as if they had been struck by lightuing, I realized that these country children surely had "eyes that see not." Two of the drawings, one of a maple and one of a pine, were very good. As I asked them to prepare for dismissal, one large girl involuntarily exclaimed, "It isn't time to go home?"

As the pupils filed out and were on their way, they watched the trees and made comparisons that would enable them to draw trees more correctly in future.-Adapted from an E.rchange.

Sbelang.-Summary, arrival, corrifor, efficient, Schenectady, betrayal, conceivable, arraigned, patvilion, lunatic, assimilate, laudanum, Delaware, corroborate, accessible, citadel, excelled, clumsy. luncheon, livelihood, carnival, anateur, rehearsal, umbrella, piteous, cemetery, Manhattan, particke, cocoa, erroncons, legacs, tournament, emberzle, illuminate, irrevocable, courtoons, relegated, anoyance, reverence, dropped. inevitable, concede, ontrageons, dectricians, interferance, conferring, connterfeit, yathting, standard, etsmolngy.

## Psychology for Teacher and Parent.

## Mrs. Catherine M. Cundon.

Every phenomenon has its meaning; and the scientist notes facts that, by the casual onlooker, would either pass unobserved or be deemed too insignificant for mention. But to the scientist " day unto day uttereth speech, and night unto nigit. showeth knowledge." By the practice of passing nothing by without observation, careful comparison, study of the relation of isolated facts, in regard to time and space and causation, and then by giving those facts their proper place in the body of ascertained truth, the scientist is enabled in this way, and only in this way, by synthesis, to formulate and enúnciate a law. No art or science is ever built up but by observation, comparison, judgment and inference. The art and science of education form no exception to this principle; but what a time it has taken to find this out!

Psycho-physiology, which concerns itself with the inter-relations of body and soul, is adding greatly to the knowledge and efficiency of parents and teachers; and that in proportion as they allow themselves to be guided by expert authority into the right track, and put upon their guard against wrong conclusions, and become habituated to a correct method. Add to this the immediate record of an observation with its curcumstances of time, place, cause and effect and varying conditions, strict adherence to truth being the key-note; and although the contribution to scientific investigation may be small, it may prove a missing link, for which monavailing search has hitherto been made, or it may be the last iota of evidence that establishes the soundness of theory. Why have we not been mo:e sedulous in our attempts at human culture, and more generous in giving the fruits of our experience to others?

The astronomer has a record, well-nigh continuous, rumning back for centuries, and, given time for his calculation, he would map out for you the starry heavens for a century to come. A difficult task. indeed, and one of the triumphs of human intellect.

But how much more difficult the task of the educator. The stars fast fixed in necessity pursue their beaten track in the heavens and their mighty revolutions with foreseen and alsolute certainty. But man, a free agent, within his limited sphere, and needing in the formative stage constant care and guidance lest he go astray, how selfom, under even favorable conditions, does he receive the searching
observation and study that is bestowed upon his subject by the student of science!

The theory of Locke, that man comes into life a tabulu rasa, on which you may write what you please, and that no ideas can exist which have not been acquired through the senses, has been for some time discarded by philosophers. It may indeed be questioned whether if Locke had been a father, and had continuously watched the development of his own child, he would ever have formulated such a theory.

More searching investigation brings in with startling force the fact of heredity; the child is a very palimpsest, written within and without, scored with lines innumerable, only some infinitesimal few decipherable, by their effects, to the keen eye of scientific research, and to the vision, rendered sharp by parental love which may be looking out for the development of known undesirable hereditary traits, so that by wise dealing they may be nipped in the bud, or their force transmuted.

The influence of heredity is profound for good or evil, according as it is recognized and given right direction, and we cannot ignore it if we would, but, like the rampant, fiery horses in Plato's noble simile, if skilfully managed, it will carry the individual onward and upward. Heredity is a spiritual force, and, while its manifestations must, in the first place, be observed by the senses, that is only half the task, for the nature, scope and limitations of this factor in human development must be spiritually discerned.

What watchfulness, what care, what ingenuity, what virtue, in a word, what wisdom of the heart, as well as the hand, is needed! Where shall we then begin? With the child. When? At birth. How ridiculous this will appear to those unthinking people who say that the child must have attained a certain age (differently stated) before he can become the subject of dissipline, before he can be trained to habits of obedieace and good behavionr and pleasant manner. It will be wise for all our teachers, in their own interest, in order to secure a happy school life, to take up this study of the child; and there are few so situated as not to have an opportunity of studying the infant in the cradle, and through all the stages of child-life up to school age. Much help may be obtained from those mothers who do not shirk their maternal duties, but "live with their children," and in that sweet and gracious life of service learn much which, if embalmed in
accurate, and uninterrupted record, would in years to come stir up inemories most precious and be of permanent value. If passed on to the child, when grown up, what a guide it would be, and what a warning, in good time, it might prove against certain tendencies that, if not checked, might prove fatal to character. For the teacher, what a full page in the brok of human nature would have been scanned, could she but watch critically the unfolding of even one child from infancy till it had passed through her grade, and what an enlargement of sympathy and spiritual insight.

Psychology, like every other art and science, must begin at the beginning, or as near the beginning as it can. For the ordinary observer that limit is fixed at birth.

As an aid to the beginner, the most complete and scientific account of the manifestation of the soul of the child, and the first glimmering light of the intellect is to be found in the record, kept regularly, at least three times a day, with scarcely any interruption, by Dr. Wilheln Preyer, Professor of Psychology in the University of Jena.
It was the record of his son, a normal child, without brother or sister, carefully shielded from disturbing influences, and it lasted over three years. All the senses, in their range, their order of unfolding, and their limitation, were observed scientifica!ly and by a man whose candor, love of trutl, freedom from bias and generous acknowledgroent of the labours of others, is manifest on every page, thus creating confidence in the mind of the reader in the competence and good faith of his guide.
Preyer's Soul of the Cilild, in two volumes. I. The Senses and the Will, \$1.50; 11, Mental Development in the Child, $\$$ t.oo. D. Appleman \& Co., New York.

To ineasure an angle by a watch, lay two straight edged pieces of paper on the angle, crossing at the apex. Holding them where they overlap, lay them on the face of the watch, with the ajpex at the centre. Read the angle by the minutes of he dial, each minute being six degrees of arc. It is easy to measure within two or three degrees in this way.

A lady once asked a little girl of five if she had any brothers.
"Yes," said the child, " I have three brothers."
" And how many sisters, my dear?" asked thu" lady.
" Just one sister, and l'm it," replied the suriall sirl. -Litlle Chronicle.

## Literature in the Whole.

How should literature be studied? It should be studied to get straight to the heart of the author,his thought and his feeling. Knowledge of his~ torical and classical allusions and definitions of words are necessary to an appreciation of literature; but any chasing down of allusions for the sake of mere knowledge, any sceking out of the origins of words, any study of the life of an anthor when it sheds no light on the work in hand, is a waste of time; for it distracts the attention from the litera-, ture, and never allows the reader to catch the fires of a great creative spirit. So, too, while literature is the best instructor in composition, it should never be called upon to grive this lesson tuntil it has first unfolded its great truth to the reader. And there can be nothing more stultifying to a class than forcing these secondary matters to a prominent place in the study of literature, because, forsooth, they are the only things that can be marked and tabulated. How often a cliild in school is trained to clislike literature because he is made to spend his encrgy turning the leaves of a dictionary or some handbook, or learning the nauseating drivel to be found in some edited texts! When an instructor arrives at this stage of teaching where little things are seen out of all true proportion, his life has already fled, and soon the life of the class will flicker and die. Every student that makes details of supreme importance is like a near-sighted man studying some noble work of arehitecture. He may know the beanty of each individual column, the perfection of each pedestal and capital, the graceful lines of each window and door; yet this near-sighted man would have little sense of the strength and harmony of the whole. And there are many statdents in our classes making a myopic study of literature. Its minntest details are perfectly known; but the great broal significance of its mighty unity is never dreamt of.

The method, then, will be to seek first the truth. If in the search historic or classic references must be known, if new words are hiding the meaning, if figures of specel need explanation, if the biography of the anthor throws light on his meaning, learn these things. But always remember that they are but incidents: the real thing is the living trath Which a great spirit has fombl and written down for the enlargement of the soul.-11. II. Wevester, in "Tcaching English in the IIigh School."

## A Habit of Observation.

Agassiz says, "You study nature in the house, and when you go out of doors yon cannot find her.." If you wish to become observant, irritate your curiosity, become inquisitive. 'Train it off into the region of the five senses.' If people were as curions about the business of their neighbors in the fie.ds and woods, in the household concerns of the birds, and the domestic relations and economies of the bugs, as they are abont their neighbors in houses, how fast would our books of original observations be filled up; for it is the same power which, piped off in one direction or the other, makes us busybodies and gossips or observers and naturalists. To' the latter end, read such books as open up the physical world; books which introduce, and provoke experiment and examination, rather than those which explain away and describe; settle down to the cultivation of a knowledge of the seemingly unimportant and uninteresting landscape wherein you find the extent of your riches to be; and you will live; and the deeper you delve the greater you will soon agree witl Charles Kingsley, "that he is a thoroughly good naturalist who knows his own parish thoroughly."

But, it is not the eye that sees or the ear that hears. Behind the eye and ear must be the secing and hearing brain, the inquiring mind, taking note of all that passes outside its windows, for such only are the senses. Do you ask, "What shall 1 look tor?" "What shall 1 observe?" Anything, everything. Examine the colors of dawn and sumset. Clond colors never got into litcrature till John Ruskin painted them. See what he says, let him introduce you to the glories of the heavens. Learn to know the birds by their cries and songs, and by their flights and figures. Note the time of their comings and goings, and find out what birds spend the winter with you. Note the putting on of the foliage ; every tree has its time and tint in spring and autumn. Find what colors predominate in the flowers in the varions seasons and montlis. Note the colors of autum, and of fanilies and groups of plants and of ripenel fruit. Learn to distinguish plants and seasons by their scents at night. There is a geography of scents of every path and highway you will find, so that you conld pick them out if you were blind. Note the works of frost, and snow drifterl and stratified and sculptured by the winds of winter.

Saunter down the lonely highway and tarry in the first neglected fence-corner tangle of brambles, weeds and vines, for the remainder of the afternoon. Nothing interesting in our well-known neighborhood! Surely we shoutd be ashamed to say it. All the problems of botany, biology, geology, zoology and evolution lie before me in the fields and woods about my home, inviting my observation, taxing my acuteness and reason. There is material for a novel and original book in every field. What we want is a habit of close observation.
All children are born naturalists, and it is only that training and occupation counteracts or overlays this faculty, that delight in nature is not more miversal. The invitation of all nature to the eye is "Come and see." Henry Ward Beecher, in his Norwood, pleasantly observes, "Yea, let me abide with the artist in fine scenery or stroll with some learned professor, who shall name familiar flowers, and let me know what bug it was that bit me, and what bird sung to me." Let us glean at least a few treasures from this store-house of a world, when the terms are so pleasant and easy:-Er.

## Lines in Season.

There is no unbelief;
Whoever plants a seed bencath the sod And waits to see it push away the clod, He trusts in God.

Whoever says when clouls are in the sky, Be patient, heart, light breaketh by-and-by, Trusts the Most High. Whoever sees, ineatli field of winter snow, The silent harvest of the future grow, God's power must know.
-Bulauer Lytton.
Let me go where'er I will
I hear a sky-born music still;
It is not only in the rose,
It is not only in the bird,
Not only where the rainlow glows,
Nor in the songs of woman heard, But in the darkest, meanest things, There always, always something sings.
-Emerson.
Still o'er the earth hastes Opportunity, Seeking the hardy soul that secks for her. Swift willed is thrice-willed; late means never more; lmpatient is her foot, nor turns again.
-Lowell.
Weakness never need be falseness; truth is truth in each degree
Thumbered-pealed by God to mature, whispered by my soull to me.
-Robert Rrozening.

## Acadia University Closing.

The past year at this institution, which closed Jume 6th, has hat in it several things which will help to distinguish it from previous and subsequent years.

What is known as the second forward movement has just been successfully completed. The first forward movement secured sixty thousand dollars from the constituency, an amount which was supplemented by fifteen thousand from Mr. Rockefeller. When even this was first undertakell there were those who were emphatic in declaring the task to be an innossible one. The realization of this ain did not make possible, however, any apıreciable advance for the schools. The mere payment of delts, without expansion in necessary directions, is retrogression. Hence the governing board felt the weight of responsibility which was ulpon them, when, at the completion of the first movement, President Trotter canne forward with his resignation. And it was just the depth of this concern. evinced by the readiness of the governors generously to employ their own means to assist in the exigency, that induced the president to withdraw his resignation and give himself vigorously to a second forwarel movement far greater than its predecessor. The ensuing communications and intervicus of Dr. Trotter with Mr. Rockefeller, through Mr. Rockefeller's secretary, issued in that wealthy gentleman pledging himself to pay into Acadia's treasury a dollar for every dollar obtained from the friends of the university, even up to one hundred thousand dollars. Therenpon legan at resolute and energetic effort to raise mothing short of this large sum, an effort which has been so wisely and zealonsly prosecuted that annowncement of its full success was made a few moiths ago. The rounding out of this enterprise is an evidence, not only: of the skill of Dr. Trotter in such an mudertaking. but of the love which possesses the Baptist peonle of these provinces for their schools at Wolfville, and of the large things that may be achieved where such love exists.
Within the year, also, and as another fruit of the president's energy, Mr. Carnegie has made an unconditional gift to the college of thirty thonsand dollars, the whole amount to be used for a wellequipped science baideng. This building, it is expected, will be erected some time next year. There has thus been olltained for Acadia during the nine years of Dr. Trotter's incumbency upwards of three hundred thousand dollars toward a required enlargement.
But while the year gone will be remembered for its financial success. it will also be remembered as the one in which Dr. Trotter's official comection with the schools came to an end. Impaired healt, las made it necessary for him to give $\mathrm{u}^{2}$, this edncational work for what is more congenial to hims
and less taxing. The appointment of his successor is now under careful consideration; and it is hopel on all sides, whether the appointment be delayed or soon made, that the one chosen may suitably follow up what has lately heen done so well.

The year will also be marked as the one in which Dr. Keirstead's absence was first felt, and the one in which Professor R. I. Gray first occupied the chair of English language and literature. The former gentlenan so long wrought in Acadia's halls of learning, and with such signal ability, and filled so large a place in the religious and educational life of our "provinces by the sea," that he has been greatly missed by his co-workers and friends during lis first year as professor at MEMaster University, Toronto, But he is not lost to us, however, since good work done anywhere reaches everywhere. Professor Gray, who stepped into the place made vacant by Dr. Keirstead, has enjoyed the best alvantages for study in American and English muiversities, and has had several years of experience as teacher and lecturer at the University of Rochester, N. Y. He has rendered such a good year of scrvice at Acadia, both in the classroom and in the varions relations of college life, as gives excellent promise for the department he represents.
On the Gth of June last Acadia College gave the degrec of bachelor of science for the first time. There was effected not long since such an affiliation with McGill C'niversity as enables Acadia's D. Sc. men to enter the third year of the faculty of applied science at McGill. The recent readjustment of courses at Acalia, and the new relation therely brought about with the large technical schools, is exactly in accordance with the requirements of nur day, and expressive of the purpose of Acadia"s governing board to keep abreast, as far as may be, with the appropriate exactions of our times.

The Baccalaureate sermon at the June closing was preached by Dr. Joseph MeLend, of Fredericton. who delivered a strong and timely address.
There was special fitness in having Dr. MeLeorl, who has long been a leader among the Free Paptists of New Brumswick, perform that service at that particular time. since union of the Thaptists and Free Baptists of New Brunswick was consummated but a few months ago.

New lirunswick visitors noted the creditable place taken by sturlents from their province in the list of those who just graduated from Acadia College. Firederick S. Porter, of Fredericton, carried off the Nothard and Lowe gold medal for the highest average in all subjects of the sophomore, jumior and senior years: Raymond P. Colpitts, of Forest Glen, took rank next to Mr. Porter, and received the Governor-General's silver medal: while Vim. If. Coleman, of Moncton, won the Kerr lioyce Tupper gold medal for oratory: Joseph E. Howe, of Tillsclale, was the best all-round athlete in the inst $i-$
tution, and withal was a first-class student in every department, graduating with honors in history ant political economy.

Nineteen in all received the B. A. degree; two the B. Sc. degree; and three the M. A. degree in course. The honorary degree of D. D. was conferred upon Rev. George Sale, of Atlanta, Georgia, and of M. A. upon Rev. B. H. Nobles, of Sackville. N. B. Special cxercises were held on anniversary day to mark the retirement of Dr. Trotter. An address to him was read by Mr. I. B. Oakes on behalf of the governors, this being accompanied by a purse of one thousand dollars. Dr. R. V. Jones read another address on behalf of the faculty. The graduating class presented the college with a fine portrait of the retiring leader. To all this Dr. Trotter made tender and fitting reply, thus closing his memorable administration.
It may be added that Horton Academy and Acadia Seminary, the school for boys and the school for girls, have both had a good year, the former having a registration of 100 , and the latter 216. It is with abundant confidence in the institutions at Wolfville, Nova Scotia, that those entrusted with their guidance can appeal for an ever-growing number of young men and young women to turn their steps thither and avail themselves of the choice educational advantages there afforded.

## King's College Encoenia. A. C. C.

The King's College Enceenia this year went off with no very special adventurcs. Dr. Hannah handed in his expected resignation, having come to the conclusion that (unless Church people are willing to contribute enough to put the college in line with the other institutions of the kind-which apparently they arc not) there is no possible future for old King's, except to federate with Dalhousie to form a larger miversity for arts and science, and to use her venerable buitling in Windsor for a divinity college. At the anmual meeting of governors, a motion with this end in view was proposed by Mr. Cotton, of P. E. Island, and seconded by the president; the opposition was such that it was modified to leave out all reference to federation, and to confine the proposal to making King's merely a divinity college. Even so, however, it was lost hy 12 votes to 10.
At a mecting of the governors held in Halifax on 5th July, it was decided to re-appoint all the professors for one year, leaving the question of a new president to a committec. The future of King's College is thus still in the balance, and it is greatly to be hoped that her supporters will speedily decide either to add at least \$100.000 to her endowments or will come to the conclusion that ten colleges granting degrees are too many for three little provinces with a combined population of well under a million, and that the plan of the Presbyterians in secking to build up a strong central university and maintaining a really fine divinity college for their nwn body is one that has been markedly justificel by its success.

## Teachers' Institutes.

Considering the great preponderance in numbers of rural teachers, their lack of influence in educational institutes may, at first glance, seem strange, but if a little consideration be given the matter, a reason will not be difficult to discover.

Tenure of office being shorter in the country than in the city, at teacher may be engaged for a term or two, wthout getting acquainted with her co-laloorer in the adjoining district, and she comes to the institute without even having talked the programme over with her next-door neighbor. The town teachers if they are not intimatcly acquainted, at least know one another by reputation, and when any question comes up relating to their own particular work, it has previously received some consideration, and some line of policy has been outlined, and when nominations for office are made, there is some cohesion among them as to those who would best represent their interests, while the country teachers who could outvote them by a very large majority do not even nominate those engaged in the same work. We do not for one moment insinuate that any intentional advantage has ever been taken of this inactivity on the part of the rural teachers, and must also acknowledge that country teachers are very backword about taking part in the work of institutes when requested to do so. They discuss very intelligently the drawbacks of ungraded work, suggest topics bearing upon the same, but take no action to bring them before Teachers' Institutes.

In the Delineator for August Clara E. Laughlin tells the story of the life of Rembrandt, whose pictures are held invaluable in the world's best collections of art, and Gustav Kohbe writes of the famons civil war song of the south, "Dixie," and its composer, Dan Emmet, the old minstrel. In the Campaign for Safe Foods, Mrs. Abel contributes a chapter on "The Market Inspector and the Buyer," which concludes this series of notable articles. There are numerons articles devoted to the interests of the home;-The Kitchen, House Furnishing. Needlework and Dressmaking; and the children's pages include a variety of features having for their purpose the entertaimment of young folks.

Tief July number of Acadicnsis has articles on Jouathan Eddy and Grand Manan. The Union of the Maritime Provinces, The History of Tracadic, Halifax in Books, with other articles of interest. 1). R. Jack, publislicr, St. John, N. B.

## Recitations for the Youngest Children.

Six and mine had a falling out;
1 can't say what it was all about.
One was angry, and said, "Oh, fie,
You know you are worth three less than I."
The other cried, with a pont and frown,
"You're nothing but six turned upside down!"
-II. R. Hudson.
For a little girl fize years old-
I'm one and one, and one and two, That is my age all told;
And if 1 live as long again, 1 shall be twice as old.

How do birds first learn to sing?-
From the whistling wind so flect,
From the waving of the wheat,
From the rustling of the leaves,
From the raindrop on the eaves,
From the children's laughter sweet,
From the plash when brooklets meet. - Mary Mapes Dodgc.

## Good night !

Sleep tight!
Wake up bright
In the morning light
Te do what's right
With all your might!
Play you are a little farmer. Cut the hay. Rake it.
Put it in your cart.
laul it to the barn.

## Excreise for Tired Children.-

I put my right foot in,
1 put my, right foot out,
I give my right foot a shake, shake, shake, And turn my body around.

I put my left foot in,
I put my left foot out,
1 give my left foot a slake, shake, shake,
And turn my body aronnd.
1 put my right hand up,
1 put my right hand down,
I give my right hand a shake, shake, shake,
And turn my bodly around.
I put my left hand up,
I put my left hand down,
I give my left hand a shake, shake, shake,
And turn my body around.
I lean my head hack,
I lean my head front,
I give my head a shake, slake, shake:
And hern my body around.
-Sclecied.

Parts of the Body
Virginia Putnam.
Touch the eyes.-
Wink and Blink are my two eyes, Kind friends they are to me;
For all the pleasant things on earth With Wink and Blink 1 sec.

Touch the ears.-
Hark and Listen are my ears, I hold them very dear;
For music and the songs of hirds With these good friends I hour.
Touch the nose.-
Sniff is my funny little nose, I like it very well;
For sweet perfumes and fragrant flowers Witl little Sniff 1 smell.

Touch the checks and chin.-
Dot and Dent are my two cliceks, And Dimple is my chin;
They get so full of laugh, sometimes, It's hard to keep it in.

Touch the lips.-
Rose and Ruby are my lips,
They were made to smile, not pout:
They were made to keep the cross words in, And to let the kind words out.
lace hand upon the head.-
Thinker is my little head, In it I store away,
For fear that I may lose them,
My lessons every dily.
Clap hands softly:-
Clasp and Clap are my two hands,
So many things they do,
It would be very hard, I think,
T'o name them all to yon.
late hand on the heart.-
l'itty-pat is my little heart,
1t beats on my left side;
I try to keep it full of love,
And free from hate and pride.
Point to the feet-
llop and Skip are my two feet,
With them I walk and run,
They're always reatly to start off
When errands nulust be done.
Iroint typard. -
To God, our Ileaveuly Father, Who gave them all to me.
Since all these useful friouls are mine,
How grateful I should be.

## Closing Hymn.

Air-" Now the Day is Over."
Now our work is over, Over is our play, Heavenly Father keep us On our homeward way.
Make us kind and gentle, Loving, pure, and true,
Be Thou ever with us In whate'er we do. -Kindergarten Reviced.

There is a Quaker, I understand,
Who, for three sons, laid off his land,
And made three circles nicely meet
So as to bound an acre neat.
Now, in the centre of that acre
Is found the dwelling of that Quaker;
In centre of the circles round
A dwelling for each son is found.
Now can yout tell by skill or art
How many rods they are apart?
Jimmy: "A man had two eggs for breakfast every morning. He never stole them; he never bought thent he never had them given him, and lee never kept hens. How did he get them?"

Jemmy: Give it up."
Jimmy: "He kept ducks."-Homan's Home Companion.

## The Streets of Paris, May 1st.

Extracta From a Letter liy Mary Johnstone.
${ }^{-}$Everybody has been looking forward with mingled feelings to May ist this year. A general strike among the workpeople, sufficiently far reaching in its results to amount to a revolution has been anticipated. The authorities of Paris with the double purpose of presarving the peace, and intimidating the strikers called into requisition 60,000 soldiers to supplement the regular garrisons.

I went out about $8 \mathrm{a} . \mathrm{m}$., expecting at least to sec all shops clos d, and the streets filled with people. To my surprise, and I may add, also to my disappointment I found quite the contrary. Many shops even the largest, namely, the Fon Marche and Magasin du Louvre open, but absolutely tranquil and almost deserted, on the streets fewer people than usual, here and there a soldier or a group of soldiers, how could one escape them when there are more than 70,000 within the walls. Not only were there few people to be seen walking or lcitering about, but hardly a conveyance. Looking chosely at the tramways and omnibuses I found they were practically empty. The same state of things existed un to the late afternom, when some few perple having heard
of nothing startling haviug taken place ventured forth on foot. As some one remarked next day, Paris had assumed the aspect of an old time New England town on Sunday. Those whom one did encounter carried a visage not Parisian. I am speaking now of the general condition and aspect. There were exceptions.

Anyone entirely ignorant of passing events walking, say in the Tuileries gardens or the Luxembourg gardens on the 3oth of April and May 1st must have felt without observing, that there was "something up." Where were the usual tourists, with their faithful "Bacdeker's?" Where the loiterers making merry at their expense? Where the merry children with their balls, their tops, their skipping ropes? Where the groups of "Noonahs" enjoying their daily gossip while plying their needles industriously? I could not have believed either of these places could be so deserted in broad daylight. True it rained heavily a couple of times during the day, but from 3 p . m. until sunset it was superb. I went about in the different quarters of the city up to 7 p. m., and directly after dinner sallied forth again. Never on the boulevards have I seen such a small pretence to a crowd. Cafe after cafe we passed with empty, descrted tables outside, a most unusual thing even in severe weather, and no more persons within than one could count on his fingers. On my way to the Hotel de Ville I made a tour of Notre Dame, and stumbled upon the morgue in my wanderings. Everything was as still and silent as death itself. Ordinarily in such an evening prowl at this one cannot go a hundred yards without seeing or hearing someone or something amusing and interesting. I crossed the Seine by the Pont Ansterlitz near the Jardin des Plantes and remarked at the time that truly Jean Valjean escaping from Javert could not have found that vicinity more deserted. At 9.30 I stood in front of the Hotel de Ville, and it is a literal fact that for more than five minutes not one person crossed "the Place." Yet even as we stood there in the moonlight, in spite of the tranquillity, there was that in the general aspect. that very absence of demonstration which made us remember that within the court and eellars of that very Hotel de Ville at that very moment were stationed upwards of 1,000 soldiers.

Now this very desertion of the streets and cafes was full of significance. One half the people stayed at home because they feared what might occur if they ventured forth, and the other half, the "might have been" disturbers of the peace were intinidated by the troops stationed in every conceivable place,

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even the court yards of private dwellings and business houses.

The day did not pass however without incident. It was necessary for the military to disperse the crowld three separate times, and upwards of six hundred arrests were made. When one remembers that on any patriotic fete the arrests amount into the hundreds, this number is not appalling.

Just at the setting of the sun as I made my way from the Luxembourg gardens to St. Germain des Pres, a sight that I shall not soon forget arrested me. It was at Place St. Sulpice. The troopers of the Garde Republican stationed in the Mairie close by had just led out their horses for their evening drink: the whole basin of the fountain was surrounded with men and horses; everything was quiet and peaceful almost a solemn bush, and the last rays of the setting sun were caught by the bright steel hemets of the troopers. The setting, the imposing facade of St. Sulpice in the back-ground and the convent with its garden walls on the side, made an indelible impression on my memory. I drew near to the basin and observed the figures in the picture in detail, and could not but be touehed by the perfect understanding between each trooper and his horse. Wach spoke
to his animal as to a friend and the horse made up in intelligence of expression for its lack of language to reply.

## CURRENT EVENTS.

Stromboli is again in active eruption.
The fourteen conferences of the Inter-Parliamentary Lnion is now in session in London. All the parliaments of Europe are represented. The representatives of the Russian douma, however, were obliged to withdraw in consequence of the dissolttion of that body.

The enlargement of the Kiel Canal is made necessary by the increasing size of war ships. Its berl will be widened from sixty to one hundred and thirty feet, and its surface width will be increased to thiree hundred and fifty feet.

After a few weeks of open war, and several slatitr engagements, a treaty of peace has been coneluled between Guatemala and Salvador. Honturas is also a party to the treaty, which provides that future differences be referred to arlitration.

Five thonsand miles of new railway will be kais this year in the Canactian West. A bridge which the Canadian Pacific will buikl across the Felly River, near Lethbridge. Ablberta, will be over a mile long and three hurdred feet above the water level.

For Entry Forms or any information address C. J. MILLIGAN, Gen. Manager, P. O. Bux 41 I, St. John, N. B.

The new King and Qucen of Norway have been crowned at Trondhjem, an ancient capital.

It is stated that the number of homicides per million inhabitants in Canada is three ; in England, ten; in France, fourteen; and in the United States, one hundred and twenty-nine.
Native and foreign scholars are now at work in Shanghai preparing three new Chinese versions of the Bible. One is in the ligh classical language of the country, another in the low classical, and the third in the colloquial tongue which is used by three-fourths of the people.

A man who has recently died in England is believed to have been the last survivor of the wreck of the troopslip " liirkenhead." the loss of which on the coast of Africa has given us one of the most striking stories of the discipline of British troops. The "Birkenhead" was originally a merchant vessel, and was built at St. Andrews, N. B.

Two cruisers will be used this year to maintain the authority of Canada and Great Britain in the Far North. One is to patrol the waters of Hudson Hay; the other to visit Baffin Bay, Lancaster Sound and Smith Channel. The headquarters of the mounted police for the Hudson Bay district will be transferred from Fullerton to Fort Churchill.

The Pan-American Congress now in session at Rio de Janeiro, Brazil, is not receiving a very hearty support from some of the Spanish-American, republics. Mutual jealousies, and fear of the influences of the greater republics, makes them somewhat distrustful of its results.

The Russian Emperor has dissolved the parliament and appealed to the people, calling a new parliament to assemble in Marcl. The chief question at issue is the expropriation of lands for peasants. In the meantime, the government has proclaimed a very liberal land policy, which it hopes will be supported by a new parliament. elected under a more extended franchise. - But certain members of the dissolved parliament. some of whom met hastily in Finland after the dissolution, have issucd a revolutionary manifesto, calling upon their supporters to refuse to supply money and troops to the govermment, and not to recognize any loars to the govermment made without consent of parliament. Bloodshed is to be feared as the result of this appeal; for the parliament just closed hat 1 already begun to regard itself as the real governing power, and the small group of late representatives who assume the right to speak in its name may find followers enough, in the disturbed state of the country, to bring about an armed uprising.

# The Provincial Educational Association of Nova Scotia 

WILL MEET AT THE

# HALIFAX ACADEMY, HALIFAX, September 25th, 26th, 27th. 

There will be three morning sessions and one or two evening sessions. Mueli time will be devoted to


#### Abstract

Discussion on the Adjustments of the Course of Study Demanded by Modern Conditions. TIIE HIGH SCHOOL COURSE will receive speial attention in diseussing the Reprort of the Committee on High Schoels and Collores.

There will be no afternoon sessions, so that nembers may bo free to study the Naturul History and Industrial Iroducts of the Dominion at tho Dominion Exhibition, which will bo ojen ut that time.


A. MCKAY, SECRETARY.

It is said that Gemmany and Austria will send armies to the help of the Russian government in case of an uprising in Poland.

A now wireless method of transmitting power has been perfected by which a crewless boat can be stecred fron the shore, and its speed increased or slackened at will.

The attempt to murder the new King of Spain on his wedding day, which came so near being successful, is fottnd to have been the result of an anarchist plot.

More discoveries of valuable minerals have been made in the Cobalt region, which is now recognized ats one of the richest mining districts in Canada. Cobalt ore, which was formerly shipped to the United States for treatment, will be refined in Canada.

A year has passed since l'cary satiled front North Sydney to find his way to the Nortly Pole, and no word from him has been received. News of his sttecess is expected in September, at the latest, if he has been successful. In the meantime. We elman, another United States explorer, is preparing to start from the north of Enrope wilh an air ship and motor sledres, hoping to reach the North bote in a flight of three or four days from Spitzorergen. There are two other Arelic expeditions out with other objects, that of Llarrison, an English geographer, who left Mackenzie river a year ago (1) winter in Banks Iand and explore licanfort sean and that of Mikkelson and Liffingwell, which keft British Columbia in May last to discover new Arctic lands. In addition to these, a Banish expedition is about leaving Copenhagen to explore the northeast const of Greenland and try to reath the Pole.

## SCHOOL AND COLLEGE.

 the heat mat-fur of St. Nham" school, Brockville, ()nt
has been appointed to the presidency of King's College, Windsor. The appointment is regarded as a very strong one.

Mr. J. S. Lord, recently principal of the superior school, learville, N. B., las been appointed on the stafe of the St. John schools. . He has been succeeded by Mr. W. C. R. . Inderson, B. D., a recent graduate of the University of N゙ew Brunswick.

Mr. G. H. Whair lats been re-appuinted principat of the Hopewell Hill, Albert County, superior school, with an increase of sallary.

The following Nowit Scotiad stulents received the master of arts degree at Yate Unimernity in Junc: Joscph dusten bameroft, Acadiavilec liarl ( H . bill, Wolfvilte (Deforest scholatship and prize of $\$ 100$ ) ; Theolore 11. Loggs, Wolfville (Scott-lItrt felluwship) ; Ruland G. D. Kichardson, Lawrencetuwn; Irthur 'Iaylor, K゙entille.

It the amanal school mecting of the ratepayers of Port Elgin, N. B., the compulasy education law was adopted ly it mathimons vote.

Sia DVillian C. Mactumatif has handed over to the l'oard o) Gosernors of MeGill L'niversity the school of agrical-
 Smae the fellesue, neat Montreal. The coot wf the buiblfig. whicl is expected to be open for students early next
 ment of two millions for maintomatie.

N1. (.. J. Callahan hats resigmed the prineipat-hip of the St. (icorst: $\therefore$. B. superior clownl, anki will enter on the staly uf law:

Mr. W"m. Whituey, latte of Milltown, N. J', who has bexn doing poat-grambate work in Columbia Luiversity, - Y... durimg the past ybur, has aceepted a pumbion in the
 lavern, Mitas.. lately fumbled by II. 11. Kogers, the Aneri(ath millionamire.
 faed ansorted a seholarship at llatvard for the line work


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1'rincipals

Alexander Muir, the author of "The Maple Leaf," and principal of Gladstone Avenue school, Toronto, died suddenly at his home in that city as he was preparing to retire, after his usual day in school. 11e was seventy-iwo ycars of age.

Mr. H. Burton Logie, B. A., and J. Roy liullerton, B. A., have resigned their positions in the Chatham, N. B., grammar selool to pursue post-graduate work. They were presented with testimonials by the pupils, by whon they are held in high esteem.
Mr. Horace L. Brittain, who has efficiently conducted the Salisbury, N. B., superior school during the last term, has resigned.
Dr. Soloan, in his remarks at the closing of the N. S. Normal School, June 28th, said that the year hats been most suceessful. There had been during the year about 1 tho students in attendance: five in the A ceass, 80 in the $B$ class, 40 in the C class, and 26 in the D elass. Of these, ahmest all were now qualified teachers.
Dr. J. 13. Hall, of the normal school staff, will take a trip' to the motherland during the summer vacation. He will take up some post-graduate work at one of the colleges of the University of Oxford. We wish the evergenial Ductor a very pleasant summer's study.-Truro deats.

## Recent Books.

Tie Chlirci in France. By Johin E. C. Bodley. Cloth. Pages 182. Price, 3s. Gul. Archibalel Constable \& Co., London.
The book contains two lectures on the Church in France, delivered at the Royal Institution, London. Their interest is heightened by the recont revolution that hats taken place in the ecelesiastical system in France. The book will be a great help to those whe may wish to stady past and cxisting conclitions in the history of the chureh in Prance. Elements of Polhtual Scifnte. by Stephen Leacock, 13. A.. 1'h. 1)., Assmeiate Profensor of I'olitical Science. Mésill University, Montreal. Cloth. Pages 417. l'rice, \$1.75. Iloughton, Miflin \& Co. Boston.
The great value of this work $\mathrm{i}_{\text {s }}$ the :athoritative and methorlical manner in which the whole suliject is treated. The book is divided into three parts-Part 1 treating of
the nature of the state, Part Il of the structure of government, Part 111 of the province of government. Under these heads the author gives a vast array of facts on systems of government and social conditions that have existed and are now existing, coupled with judicious criticisms and conclusions.

Systematic 1norganic Cifemistry. By R. M. Caven, D. Sc. (London), and G. D. Lander, D. Sc. (St. Andrews and London). Cloth. Pages 374. Price, 6s. Blackie \& Son, London.
This is a book for advanced students, written from the standpoint of the Periodic Law. The elementary parts of the subject are either omitted or recapitulated, in order to give greater prominence to those intended for students ratang for their final degree or other adwanced examinations.
l'irst Step's in Mental Growtil. By David R. Major, Ph. D., Professor of Education in the Ohio State University. Cloth. Pages 360. Price, \$1.25. The Macmillan Company of Canada, Toronto.
The studies in this book are based upon constant observations and experiments made upon a child during the first three years of his life, and the atuthor's interpretation of them. The records present a suggestive series to those interested in the psychology of infancy.

Arthur Hassall's Brief Survey of European History, cloth, pages about 400 , price 4 s . 60 l ., presents a historical sketch from the coronation of Charles the Great to the present day. Only the great events are emphasized, special attention being given to the causes and results of the great movements in history: It is provided with a good index and with maps. Blackie \& Son, London.

Blackie's Model Arithmetic, Number Six, price \&d., contains a varied and abundant array of problems for solution. Blackie \& Son, Lonlon.

Rev. S. Claude Tickell's exposition of Latin Syutax is a concise tabular summary of the rules and examples governing Latin prose composition, arranged in a series of formule: price 1 s . Gul. O. Newmann \& Co., London.

Gaston Boissier's Tacitus and Other Roman Studies is a critical and scholarly series of essays on the pre-eminent place in historical literature occupied by the great Roman. Cloth. Price 6s. Archibald Constable \& Co., London.

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Child Life in Our Schools, ly Miss Malsel A. Brown. cloth, price 3s. 6x., is an interesting contribution from an English point of view, of the lirst steps in a child's cducation. It emphasizes the importance of maturestulls. geography, school gardens and other means of directing the self-activity of children. It is fincly illustrated, and its sehemes of work for primary sclools are wery suggestive to teachers. Geo. Philip \& Son, 1 ondon.

A fine selection of reading matter for young people is to be found in Mackic's Story-book Rearlers, attractively presented in good type and ilhstratel, consiting of about 100 pages each, price fourpence a volume, and all selections from good authors. Among them are the following: Saxon and Norman, from Scotts " Fvanlioc;" In the Days of Nelson, from Winder's "With the Sea Kings:" On the Welsh Marelies, from Scott's "The Betrothed: " Charlic Marryat, from G. A. Henty's "With Clive in India;" The Loss of the " Agra," from Charles Reale's "Ifard Cash;" Martin Rattler, abridged from R. . II. Ballantync's story. Plackic \& Son, london. Firom the same publisher there is a smaller series for yonnger children, presented in the same attractive binding (red) and good type, price 2d. and $21 / 2$. each, suital)le for grades one and two. These are storics adapted from such author, for children as Geraddine Mock!er, A. R. ITope and others Teachers that are rin the lookont for literature for the youngest children should combult these lusohs.

Readers of Firench will fitcl in The History of Aladdin and his Marvellous Lamp, price 1s. (xl., with metes amd vocabulary, a story that is sure $t o$ interest old or yonum. Le live des Jenx, a book of twelve ferench games fors English chileren, price is., well illatitrates the interembing methods adopted of late $y$ cars in the teathing of firench to young people. The games are bright and lively, and will be entered upon with eest by children who are ponessal with a little knowledge of lirench. blackic \& S.on, London.

Winbolt's Latin Hexameter is a little book, price 25 ., containing rules for hexameter writing, sufficient to cover a course of two gears in Latin. It is conveniont in form, and will prove serviceable to the student of Latin verse. lirom the same celitor we have books V. V1I, V1IJ, IX of Virgil's Aencid, price Gd. each, without notes or vocaln-lary,n-good text-hooks, and at a low price. Blackic \& Son, London.
In Blackie's English School Texts, edited by W. 1I. D. Rouse, Litt. D., we have Ilolinshed's England in the 1 Goth Century and laak Wilton's Complete Angler, price Got. each, well known classies, in a low-priced and convenient form. Blackic \& Son, London.
A phonetic transcription of Black's La Promicte Amede de prameais, presents some difficulties, on first sight, to the ordinary reader on aceont of its somewhat cabalistic chatracters. Its promise-to ease the way to French pro-nunciation-does not sectu hopeful. Adam and Charles Batck, London.

## Recent Magazines.

Leading articles in receat mumbers of littell's Lizing Ase are kussia at the Parting of the Whays, which draws a vivid pieture of the disturbed conditions through which Russia is now passing: an appreciation of John Stuart Wilt, Dy Joln Morley; an lacursion into D'pomacy, by Sir Arthur Conan Doyle, an extremely interesting aceonum of the work which he matertook to dear the mane of Dititish soldiers from accusations of ernelty datring the Boer war.
"The July Conudien Magazinc has an extensive tange of artucles, which carries the reader to the Antaretic, to New \%ealand, to the Mps and into the Rockies. Mr. MeCready continues his excellent reminiscences of the first lecteral l'arliament at Ottawa, describing a dhel between Mesirs. llowe alld Tupler. Julge Savary has ath interesting paper on the Acadians, and among the short storics is one from the pen of the late Dr. Ceorge Stewart.
'Tlue Allantic Monthly for July has a varid d and interest ing table of contents, including escays, protry, stories, atiatale for the season, that will be appreciate ing ammor readers.

## Just Now

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Educational Review $\mathfrak{w l p p l e m e n t , ~ w e p t e m b e r , ~} 1906$.


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# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

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THE EDUCATIONAL REVIEW,

## SEPCEMBER.

whille summer days grew brown and old, $H$ wizard delved in mines of gold;
no idier he-by night, by day,
Ge smiled and sang and worked away.
Hnd, scorning thrift, with lavish hand fe cast his gold across the land.
\$till smiling, o'er the trees he wound
Long russet scarfs with crimson bound;
Fe drew a veil of purple haze
0 'er distant hills where cattle graze;
fe bathed the sun in amber mist,
Hnd steeped the sky in amethyst.
Low in the east, for crowning boon,
fe hung the goiden harvest moon;
Find donned his coat of frosty white
Hs twilight deepened into night.
Chen to the roll call of the year
september answered, "T am here!"

Professor Elaler E. Brown, of the University of California, has been appointed to succeed Dr. William T. Harris as United States Commissioner of Education at Washington.

A fine opportmity is given the Nova Scotia teachers this month of attending the Provincial Educational Association at Halifax, and also the Dominion Exhibition in that city.

Instean of the usual review of "Recent Books," which appears each month in these columins, we shall in this number let the books speak for themsclves, by publishing short extracts from them.

Wim. Crocket, LL. D., has retired at a ripe age from the principalship of the New Branswick Normal School. His long and devoted service to education, and the esteem and gratitude in which these services are held by thousands of his former pupils,, now in cvery walk of life, must be a great solace to him in his declining years. All will join with us in the hope that these years will be spent in the quict that crowns a well spent life.

Mr. H. V. Bridges, M. A., Inspector of Schools, has been appointed principal of the Normal school in place of Dr. Crocket. Mr. Bridges is a graduate of the L-niversity of New Brunswick. He has had a large experience in educational work both es teacher and inspector, an experience that will prove valuable to him in this responsible position. The Review joins with his many friends in wishing Principal Bridges many years of ascfulness in this more cnlarged and important sphere.

The subject of our picture this month is one that will take the attention of every boy or girl. The thoughtulul attitude of the boy, James Watt, as he watches the steam issuing from the tea-kettle, the mother at the open door with her rapt gaze, the father in another room; the simple furniture, the table of books, rude fire-place-all form a simple picture of a Scottish home of a century and a half ago. Teachers will find it a work of absorbing interest to the children to pick out the many objects in the old-fashioned kitchen.

## An Important Report.

The Provincial Educational Association of Nova Scotia, at its meeting in Truro last year, listened to a paper from Professor E. W. Sawyer, of Acadia College, in which he claimed that there is at present a seriotis lack of proper co-ordination in the work of the high schools and colleges, the result meaning serious loss and injury to the province. A committee was appointed, consisting of nineteen members, representing the academies and degree-conferring colleges of the province, with Dr. A. H. MacKay as chairman. The report of this committee, which is to be submitted at the approaching meeting of the Association, has been published, and is a most interesting document, dealing with the whole subject of secondary education in a most impartial spirit, and quoting from leading edttcationists throughout the civilized world in support of the recommendations advocated.

The report briefly, yet carefully, states the conditions and makes its recommendations:

The committee were unanimotisly of the opinion that, in mathematical and in science subjects, the standard in our schools has been raised in recent years and the work in them had been greatly improved and would compare favorably with that done in the schools of any other country; but that language studies had suffered from being comparatively neglected, and that our schools were in this respect behind those of the most progressive and enlightened countries.

This condition of affairs had resulted moreover in an unsettling of the relations between the high schools and the colleges. The advance in the standard in mathematical and in science subjects and the making of both of these lines compulsory on all high school pupils, had brought about in these an overlapping of the colleges by the schools, and, to avoid the waste involved in duplicating work already done in the schools, it has been found necessary for the colleges to re-adjust their courses in mathematical subjects by raising their standard by an amount equal to the work of about one session or year. On the other hand the putting down of Latin, Greek, French, and German, merely as extra subjects to be taken up or not just as the pupil or teacher saw fit, placed these subjects at a great disadvantage as compared with the others which had been made compulsory, and resulted in a considerable diminution in the number of those studying them and in less attention being given to them; for, with the spirit of emulation engendered by the govermment examinations, both teachers and pupils naturally directed their attention to those subjects from which there was no escape, and in which a certain minimum of marks had perforce to be made, if the pupil was to receive the coveted "pass" certificate. In the case of these languages thercfore, and more particularly in the case of Latin and Greek, the schonls had been falling away from the colleges, and although the colleges had been trying to keep in touch with the schools hy repeated lowerings of their entrance requirements in these subjects,
a point had been reached when it had been found absolutely necessary to start beginners' classes in the colleges in both Latin and Greek in order to accommodate the many who now enter college with little or no previous instruction in those subjects, and who wish to acquire a knowledge of them. It is to be hoped that these classes, or that in Latin at any rate, may not be found necessary for more than a year or two after the present high-school course has undergone revision.

The committee believe that the cotrse of study in the high school should be such as will not only furnish a sound mental equipment for those who leave the school to enter upon the business of life, but will also serve as a fitting preparation for those who may wish to continue their studies in the college or professional school. It is certainly one of the proper functions of the high school to serve as a connecting link between the elementary school ${ }^{\circ}$ and the college.

The committee believe further that the two objects which nominally appear different are after all essentially thesame; that the aim in both cases should be to really educate rather than instruct, to improve the character and: to develop and strengthen the intellect so as to bring it to the highest possible condition of efficiency in whateversphere it may be called upon to act, rather than to cram the memory with a number of bits of knowledge however interesting or valuable these may be in themselves or in the eyes of the advocates of so-called useful knowledge.

The committee then proceeds to draw utp a tentative course of study for the four years' high school, with seien subjects only for the ninth, tenth and. eleventh grades, and nine subjects for the fourth year. To show what radical changes the report' recommends, it may be stated that the course at present in use for the first tliree grades outlines an average of twelve subjects in each grade instead of scich, with all the langtuages except English as optional. The report recommends Latin as well as English for all grades, each language to count dotuble that of any other subject.

The committee lays particular stress on two points: First, the stiperior advantages of training that the more condensed course, would afford; and second, the great advantages arising from the study of Latin.

In an admirable appendix the opinions of many eminent educationists throughout the world on these two points are carefully summarized. The committee seems to have done its work with great industry and intelligence.

A correspondent, who is a competent critic. kindly sends us the following facts concerning the report:

The report shows that the committee took itself and its duties seriously. The work of its sub-contmittce on publication has been conscientionsly and
thoroughly well done. The results of the general committee's deliberations and enquiries and the related appendices, all of which are presented in an unusually clear and interesting manner, makes this report by far the most important document relating to education in Nova Scotia that has appeared in many years. It is worthy 'of the widest possible publication, and should be in the hands of all who are interested in education in these provinces.

Unfortunately, whether justifiably or not, a considerable amount of the interest recently taken in school matters in Nova Scotia manifests itself in adverse criticism of things as they are. The business men complain that the boys and girls coming to them from the schools, as a rule, write badly, spell badly, and perform simple arithmetical computations slowly_ and inaccurately. Those looking for further good qualities complain that pupils in school are not trained to think, and that they are painfully lacking in the ability to make a continuous mental effort in one line for a reasonable length of time. Experienced teachers of good standing in their profession complain that the existing curriculum and regulations practically constitute a system of militarism for them, and results in over-pressure on their pupils. Whether the committee's report contains any comfort for the souls of any or all of these complaints, is for them to judge. The report is constructive at any rate, and gives suggestions and sets forth a well-reasoned-out scheme for the improvement of existing conditions. This is a great advance on mere restive carping criticism.

Whether one agrees with the conclusions reached by the committee or not, he cannot but accord praise to the report for one thing. It is perfectly straightforward, frank and ingenuous. On debated matters of general theory the publication committee is exceedingly eareful to give clear and exact references to all its authorities. This in itself makes it valuable to teachers. These references show how easily any teacher can get first-hand information concerning the opinions of the leading educationists in America and Great Britain.*

Some of these references are so useful to those interested in current discussions on educational topics that they are here quoted as given in the report.

[^16]Concerning Latin, the report says: "One point on which the committee were perfectly unanimous, was the very great importance of the study of Latin, and the desirability of its being taken up by every high school pupil. On this not a dissenting voice was heard. The committee, it might be noted, was not a one-sided one in its composition. Among its members were inclucled teachens of various sciences, modern languages, mathematics, and other subjects, as well as teachers of classics; but all, without exception, were anxious to see Latin given a very prominent place in the high school course of study."

Concerning the courses of study in N. S. schools and the labors of educationists elsewhere the report says:
"The committee would remind those who take an interest in education in Nova Scotia, that it is now some fourteen years since any material change has been made in the course of study prescribed for our schools. Some of the results arrived at by these labors are open to us in a number of exceedingly interesting and valuable reports, and it would be strange indeed if we in Nova Scotia could not learn something from them. Among these there are four documents to which the committee desires to direct the attention of our teachers and the public in general." These are the reports mentioned in the footnote.

There are four appendices to the report. Appendix I. is on the importance of limiting the number of subjects to be studied; Appendix II. The importance of language as an instrument of education; Appendix 111. The importance of Latin as an instrument of education. These three appendices consist of quotations from educational associations and committees in America and Great Britain, and from leading edueationists in those countries and in Germany. Appendix IV. is on Secondary Education in Germany, England and the United States. It gives the courses and time tables in several of the leading secondary schools in those countries and the ligh school courses recommended by the Cominittee of Ten in the United States. The above synopsis is sufficient to show that the thanks of the teaching profession and the public are due to the publication committee for the able manner in which they have drawn up their report on the relations between the ligh sehools and colleges in Nova Scotia.

[^17]
# The Foundations of Chemistry as Seen in Nature Study.* 

By John Brittain, Woodstock, N. B.
In order to teach effectively we must distinguish carefully between the trivial and the important between the accidental and the essential. We are apt to spend too much of the precious school-time over the details which have little significance-the lifeless husks which enclose and conceal the living germ-thoughts. We think that we must do this in order to be thorough; but we deserve no credit for thoroughness in doing things which should not be done at all or which should be done elsewhere or at another time. Let us rather devote our skill and patience to the development, in natural and logical sequence, of the great facts and principles of nature and of life. Practice and the habit of observation will ensure a sufficient knowledge of details.

## Chemical Union.

At the basis of all the natural forms we see organic and inorganic-lies the fact of chemical union or combination. To learn to distinguish it, by its effects, from mere mechanical mixture, it is not necessary for the learners to wait until they have become acquainted with the molecular and atomic theories. Only very simple apparatus and cheap material are required for the experiments which follow.

Each member of the class is supplied with a small stick of $d r y$ white wood. The sticks are held for a few seconds in the flame of a spirit lamp. At once a soft black substance appears in the heated part of the stick-a substance which will mark on paper and which will be found to be insoluble in water. The pupils recognize this as charcoal which they may be told is a form of carbon. Now the question is, where was the charcoal before the stick was heated? We could not see it before that was done.

It will be found, by holding the hand above the flame of the lamp, that no charcoal issues from itnor does it come out of the surrounding air. Hence it must have been in the stick at first. But why did the charcoal not then make the stick black ?

Heat slowly and carefully a little of the wood, cut into small pieces, in the bottom of a closed testtube. Clear drops of a tasteless liquid like water form on the inside of the tube above the wood; and as the water gathers, the charcoal appears. The

[^18]water evidently comes, out of the dry wood and leaves the charcoal behind.

It can easily be shown, by means of a hand balance, that a piece of charcoal (from a stove) weighs less than a piece of the dry wood, equal in size, from which the charcoal was obtained.

It is plain then that $d r y$ white wood contains both charcoal and water, and that when the water is driven out by the heat, the charcoal can be seen. And so it appears that the water in the wood hides the charcoal, else the wood would look black, and the charcoal conceals the water, else the wood would feel wet.

It may now be stated that when two substances -as charcoal and water in this case-are.so united together that they conceal each other's properties, the two substances are said to be chemically united or combined; and the substance they form by their union is called a chemical compound. Thus dry wood may be regarded as a chemical compound of carbon and water.

Next mix together, in a bottle, water and powdered charcoal. Do they unite chemically? They do not conceal each other's properties. The black clarcoal can still be seen and the water felt. They now form, not a chemical compound, but a mechanical or physical mixture. But how can the charcoal and water be got to unite chemically? They must have been chemically separate before they united to form wood; but we don't know, at present, how to compel them to combine to form wood.

Put finely divided wood, to the depth of about an inch, into a test-tube loosely closed with a cork or the thumb-and apply heat until the tube is filled with smoky gas; then without withdrawing the heat remove the cork or thumb, and try with a match until you succeed, to set fire to the gas in the tube. How do you account for this combustible "woofgas?" Since this gas will burn, it cannot be watergas (steam) ; so we must conclude, since chemists find that pure wood is composed entirely of carbon and water, that this gas was formed in some way from these two substances in the wood. It should be noted here that the water set free by the heat soon becomes colored by some other liquid, and that a mass of clarcoal remains in the tube after the water and the combustible gas have been all expelled. It will be found upon trial that this charcoal residue, although it will not burn with a flame like the gas, will slowly burn away with a glow when held by a wire in the flame of the lamp.

It. seems from this experiment that when wood is heated in a closed space, it breaks up into other substances besides charcoal and water. This will exjlain too, in part, the manufacture of charcoal and wood alcohol by the destructive distillation of wood, that is by heating wood in closed vessels, and the production of coke (carbon) and coal gas from bituminous coal by destructive distillation.

Let the children char small samples of starch and sugar-try whether they contain water-and whether combustible gases are formed when they are decomposed by heat. The last experiment may be performed by heating a little starch and sugar in an iron spoon uutil they take fire. It will be seen that the solid substance does not burn, but the flame is a burning gas which rises from the solid matter. The starch and sugar are really being heated in a closed space, shut off from the air by the spoon below, and the burning gas above. In like manner, in the case of wood fire, we see that the flames are caused by the barning of the combustible gases, given off from the hot wood.

The children will now be able to describe the results of their experiments with sugar and starch, and to state and justify their conclusions as to the composition of both. They will doubtless conclude that, like wood, starch and sugar are probably comlosed of charcoal and water chemically united. They may then be told that sugar, starch and wood and several other substances of similar composition are called carbohydrates. The fitness of this name should be shown from its derivation.

In all this work, the teacher is supposed to act only as the director of experiments and as the referee in deciding the validity of the arguments and inferences. His skill is measured by the success he has had in inducing each pupil to do his own observing and thinking independently.

After a careful review of the whole ground, the children should retain a good working idea of chemical union-will see that heat tends to separate substances that have been chemically united-will understand what agricultural lecturers mean by car-bohydrates-will know that when carbohydrates are heated in a closed place until they decompose they break up into carbon, water, and other substances liquid and gaseous-will sec that a flame is a burning gas, and that a solid. as carbon, burns without a flame-and will be able to form an intelligent conception of many processes in nature and the arts which would otherwise be quite inexplicable.

The main topic in these lessons-for this work covers several lessons-is chemical union; but the other topics discussed are important, and all of them help in making clearer the idea of chemical union. This illustrates another method of making our teaching more effective, and saving time in the process. I mean that while we keep in view one principal topic we should always associate with it cothers which are significant and worth teaching in themselves, and at the same time are so related to the central topic that they can be used effectively in enforcing it.

A correspondent of the Manchester Guardian makes some very reasonable suggestions on the education of the agricultural labourer. He declares that the curriculum of the ordinary elementary school is not well fitted to do its work in rural districts. It is too literary, and bears no direct relation to the probable life-work of the village children. Many of them are to be agricultural labourers, but the last thing we dream of teaching them is the science and art of agriculture, or the scientific facts which will stand them in good stead in their future work. What, then, is his remedy? It is, briefly, that we should follow a plan similar to that which has been carried out in France, since 1893, "écoles primaries supérieures." The aim of these schools is to give technical instruction of a commercial, industrial, or agricultural nature to the boys in the French communes as they are drafted out of the ordinary primary schools. The Commune bears part of the expense, and the State helps with scholarship grants, and grants in aid of salaries. What these schools profess to do is, "to direct the minds of the pupils from the first day to the last towards the necessities of the practical life which awaits them." "The agricultural course," says M. le Blanc, one of the chief authoritics upon agricultural education in France, "makes it its special aim to teach the laws of Nature, and to instil into the minds of its pupils those scientific notions which they could never acquire at home. To attain this end lessons on the theory of natural and physical sciences, or even on agricultural sciences, are not sufficient. Experiment must give the students a substantial grounding, and this knowledge must be completed by further experiments intelligently carried out by themselves."

I feel that I must have the Review in my work.
T. T. G.

## S. J. Farnham.

Miss A. Maclean.

At Ogdensburg, N. Y., is a monument with this inscription: "Soldiers and Sailors, Township of Oswegatchie, War of the Rebellion, 1861-1865." For this monument many designs were submitted, but the originality and beatty of S. J. Farnham's design won. She chose as lier subject the "Spirit of Victory," representing this by a female figure in flowing garments with a wreath of laurel in her left hand and a flag in her right. The figure is seven feet in height and the flag standard rises four feat higher. The figure stands on a fluted Roman column and base of Barre granite twenty-four feet high to the top of the cap. Around the lower part of the column are four war eagles, scanning the face of the world as they stand posed on an endless fasces, representing strength and eternity. This bronze group is resting on the top of the base proper, and on each of the four sides of the base is a bronze shield, with inscription and decoration. Near the top of the column is a bronze wreath of maple leaves. "Victory" is nobly balanced, and expresses grandeur and power. The face is sad, and the head has a slight droop. This rendering is in accordance with the artist's idea that there must necessarily be sorrow and tragedy in every victory. The bronze soldier who stands on guard at the base seems a being who has lived and suffered and :s possessed of soul. The artist considers this her greatest work as yet, but she has produced others of great beauty and merit.

In the Italian garden of Captain Emerson, of Baltimore, is a beautiful fountain, the design being three laughing nymplas, and the boy, Pan, who is clasping a bunch of grapes from which the water spouts. Mrs. Farnham's little son, " Jim," posed for Pan. He made an icleal model, entering into the spirit of his mother's conception, and the mischievous laughing figure of this joyous, winsome child in its utter primeval irresponsibility is most attractive. Beneath the fountain are these impromptu lines written by Mrs. Farnham:

> In Arcadia, hallowed spot,
> Sans reproache et sans culote,
> Graces in alluring shapes
> Played and danced among the grapes,
> None to question or to hamper,
> None on fun to east a damper.
> Joyous spontaneity,
> Knowing not propriety.
> Would the All Wise Power saw fit
> To unlace our lives a lint,
> Give us rom 10 breath, and be
> Like the gods in Arcady!
S. J. Farnham is a fearless and dashing equestrienne, and well understands horse nature, and enjoys galloping over her western ranch as much is anything eise in life. This fact accounts for the spirited bronze work called "Cowboy Fun," vibrant with life, irresistible force and swift onward motion.

Mrs. Farnham's marble bust of the beautiful Mrs. H. Bramhall Gilbert is a fine example in correctness of technique and perception of character. The Great Neck Steeplechase cup, won by Mr. W. R. Grace in 1904 is another specimen of her work, and it, too, shows her accurate knowledge of horses and her skill in depicting them.

And the marvel is that six years ago this sculptor did not know anything of the great gift God had given her. While recovering from a severe illness lier husband brought her some modelling wax in the hope that it might help her to while away the hours of enforced inactivity. She at once fashioned in wax a recumbent figure of great beauty, representing Iris, the goddess of the rainbow. Having no proper appliances, she pressed into service surgical instruments of various kinds by way of armature. Her surgeons vouched for the corectness of "Iris" from an anatomical standpoint, and were amazed that it was an initial production.

Mrs. Farnham had the advantage of extensive foreign travel, and thus became acquainted with the masterpieces of ancient and modern sculptors in all lands.

Little teaching from the schools is possessed by this original artist. But she has tremendous earnestness. Her skilful hand and eye furnish the externals, and the soul which she puts into her work is, after all, that which makes the grandeur and assures the lasting value of a work of art. In her judgment the personality of an artist working from within must determine the particular aspect and treatment of the subject chosen. She likes best scupltures that are full of force and emotional expression. She puts her whole heart and soul into all she does, and those who have seen her work can only conclude that the virile strength and stubtlety in execution, combined with her visual and temperamental gifts, insure to her a crowning future.

The season of bird migration has now begun. Many lirds are already assembling for the journey to the south. Why do thev go? When will they return? These and many other questions in relation to birds will furnish occasion for September talks.

Victoria is half way between London and Hong Kong.

# A Great Mediæval School. 

"The School of the Palace."<br>By Miss Catherine M. Condon.

Let us, in imagination, transport ourselves back to the ninth century of our era, say, about $\mathrm{SO}_{5}$ A. D., and, finding ourselves at Aix-la-Chapelle, niake the best of our way to the Palace of Charlemagne. We shall not need to ask our way; its turrets, battlements and fine arcaded cloisters will sufficiently indicate it. Before the massive gates stand the guards, in full armor, holding lance atid battle-axe. Like their imperial master, they are of great stature and strength. Passing them, we go through the court-yard, where military and athletic exercises are proceeding with vigor. Presently, at a given signal, the different groups of various ranks and ages break up and march into the school-room, the great hall of the palace. Among the royal children are Pepin, King of Italy, and Louis, King of Aquitaine. They are still yung, for they were taken to Rome by Charlen!agne, their father, in 801 , and anointed by the Pope at the age of four and three respectively. They probably enjoy a visit home, as well as other little boys who do not wear a crown.

This "School of the Palace" is a mixed one. Some have thought it an academy, for learned conversation and communion only. But instruction was imparted in literature, and such science as was then possible. Special stress was laid upon the teaching of religious doctrinc and practice, as was natural, when the only teachers were ecclesiastics.

But careful primary work would be as necessary then as now to prepare for the stucly of the liberal arts; and still later in life than this, Charles, finding his good right hand more facile with the sword than the pen, was practising penmanship, desiring to improve it; and no doubt some one in the school skilful in the writing and illmmination of manuscripts would assist the Emperor, who would no doubt avail himself of the splendid manuscripts received as presents from the Emperor at Constantinople; and from the Caliph of Bagdad, the renowned Haroun-al-Raschid, who also sent him an elephant, apes, rugs and carpets, and a curious striking clock, with many other rich gifts. The tone of the school must have been wonderfully liberal, for he charges the bishops and abhots that, "they should take care to) make no difference between the sons of serfs and freemen, so that they might come and sit on the same benches, to study grammar, music and
arithmetic." Many a clever serf repaid this generosity by signal service in church and state.

Let us mark the founder of the school. Crowned and robed, he is seated upon his throne in the stately pillared hall ; but you will need no regalia to recognize him. That form of heroic mould, with its instinctive dignity and grace, the dome-like head with its white flowing locks, its large and piercing eyes, with its grandly cut features, well express his intellectual power, and mark him out as standing in the front rank of the great men of all time; as soldier, statesman and scholar.

During his reign of forty-six years he carried on fifty-six campaigns, one, that against the pagan Saxons, lasting thirty years. He conquered the Avars (Huns) by the same picce of strategy that won for Napoleon the battle of Austerlitz-a double base of operations against the enemy. As a statesman, he won as much by his diplomacy, which was at once shrewd and generous, as by the sword; and it may be doubted whether he would have so completely subjugated the savage Saxons if he had not won over their able chief, Witikind, by his magnanimity and fair dealing.

But Charlemagne was not content simply to conquer, he determined to Christianize the rude pagans and to introduce law and order, and thereby to render his dream (a vain one) of a re-established Roman Empire, a solid and permanent fact. But he would make it a Holy Roman Empire. Therefore he built churches, monasteries, and cloistral schools among them: and when they destroyed them, and their inlalyitants, with fire and sword and umutterable cruelties, he. did the work over again, for there was no turning aside that indomitable will from its purpose. He was, however, a true German, and reverenced what was good in their old institutions, and respected, as far as possible, their sentiments and traditions; but, said he, "the Saxons must be Christianized or wiped out." It has heen quaintly said, "he inflicted baptism upon thens." The noblest men do not rise altogether above the spirit of their time.

As a scholar. his attainments were remarkable for that age: he was a good Latinist, and understood Greck. He was fond of the "joyous art," and brought musicians from Italy to improve it ; and like Luther, 700 years later, reverently ordered the "service of song in the house of the Lord." He was also a diligent student of logic and astronomy: Only four of the winds had been hamed before him, but he distinguished twelve, and
gave to them and the twelve months of the year Germanic names, and drew up, with some scholars of his academy, a Germanic grammar. He collected and preserved the old heroic ballads, songs and verses, which are largely the foundation of the Nieberlungenlied. His grandfather, Charles Martel, on the field of Tours, 732, had inflicted a crushing defeat upon the Saracens, which defeat, it has been pithily observed, " settled the question whether the Koran or the Bible should be a text-book at Oxford."

His father, Pepin le Brèf, had by his protection of Pope Stephen, and his bestowal of the Exarchate of Ravenna laid the foundation of the temporal power of the Holy See. This gift, confirmed and enlarged by Charlemagne, led to his being crowned Emperor of the Western Roman Empire, 25th December, 800 A. D.

Henceforth, German barbarism was to be more ana more softened by Italian learning and refinement. The kingdon left by Pepin was to expand into an empire stretching from the Ebro in the west to the Danube, and the confines of the Eastern Empire, and from the North Sea to the Mediterranean, and to cmbrace Italy fronı Aosta to Calabria.

The "school" justified itself, for we read of no fewer than twenty-thre great dignitaries trained in it, eminent in Church and State, among them Pope Sylvester II, who was also an author.

At the head stands the director, Alcuin, who was an Englishman, a native of Yorkshire. still famous for stalwart men, rich musical voices and shrewd business faculty. No doubt the tutor, trusted friend, and adviser of Charlemagne, exhibited to the full their fine wholesome characteristics. His writings, thirty in number, by thcir excellence and variety, attest his learning and industry. Our own Egbert. who had fled from Offa the Terrible, probably learned lessons of wisdom in the famous school of his protector.

Eginhard, considerably younger than Alcuin, received in the school the scientific instruction necessary to fit him for the position of "Chief of the Works to the Palace." He has left us interesting Chronicles and a biography of Charlemagne, and the only contemporary account of the heroic stand of Roland at Roncesvalles (Roncesvaux).

Hincmar afterwards Archbishop of Rheims, near the end of the century, gave a striking proof of his ability. Adalbert, Abbot of Corbie, and cousin of Charlcmagne, had written a treatise, "De Ordine Palatii" (Of the Ordering of the Palace)

It contained a very full account of the "Missi Dominici," which institution has always been considered a mark of Charlemagne's genius. These were officers appointed to visit 'every part of the empire, to look into the minutest details, and, if necessary, to take prompt and decisive action, and to report everything to the emperor, especially the causes of any trouble. His treatise also gave a full account of the national assemblies convened by him, stating their mode of proceeding, the due arrangement of clerics, laics, etc. The freest discussion was invited, but while the most absolute power was really exercised by Charlemagne, these deliberative assemblies must, by his wisdom, tact and liberality, have been wonderfully educating to a barbarous and disunited people. No fewer than thirty-five were held between 776 and 813, A. D.. Adalbert's, work was lost, but Hincmar almost, perhaps entirely, gave, its substance in a letter of instructions, when near the end of the century (ninth) he was applied to by the grandees of Carioman, the son of Charles the Stammerer, for an account of the government of Charlemagnc. Quite an inteilectual feat for so old a man, and, for posterity, a most valuable piece of work.

The Heads of the "Schools" took names from antiquity. Alcuin was Flaccus (Horatius Flaccus); Angilbert was Homer; Theodulph, Pindar; Charlemagne was David; Eginhard, most appropriately, Bezaleel, after the artist-nephew of Moses. Certainly those who took the names did not dim their lustre. But it was not all study. There were hunting parties and sports, and especially bathing in the tepid waters for which Aix-la-Chapelle has been famous from Roman times to our own day, a sport loved by the emperor. Sometimes as many as onc hundred persons would be invited to disport themselves with the emperor, whose health was perfect, until his last short ilmess of 1!14 risy.

Some time before his death he had set aside twothirds of his property for religion and education, reserving onc-third for disposal at his death. He had founded twenty-one Metropolitan Sees with monasteries and cloistral schools. His bounty to suffering Christians, even in far-off eastern lands, was unstinted. It may well indeed be doubted, whether any one man has done so much to lift Europe out of the slough of ignorance and barbarism as rlarlemagnc.

I find the Review a great help in my school work, and would not do without it.
A. A. P.

# Our Rivers and Lakes - No. II. 

1.-The River St. John.

By L. W. Bailey, LL. D.

Those readers of the Review who may have perused the last chapter of this series of sketches will recollect that a river is therein shown to be comparable with a living thing, and as such to have a history, involving periods of youth, maturity and old age, each marked by well-defined characteristics. We may now procced to see how this comparison finds illustration in the rivers and streams of Acadia.

We may naturally begin with the St. John as being not only the largest river in the Maritime Provinces, but aiso the largest to be found in eastern America south of the St. Lawrence. It is also the most varied, and in different parts of its course affords the best examples of the subject under consideration.

The St. John river is usually regarded as having a length of four hundred and forty-six miles, and a total drainage area of about 26,000 square miles, embracing considerable portions of Maine and Quebec, as well as of New Brunswick. It is navigable by ordinary steamers to Fredericton, a distance of eighty miles, by flat-bottoned steamers to Woodstock, sixty miles above Fredericton, and by canoe from Woodstock to its sources in the St. John ponds on the western side of Maine. Many of its tributaries, including in New Brunswick the St. Francis, Green. Grand. Tobique, Nashwaak and Oromocto, are also similarly navigable when the water is at ordinary height. The head of the Tobique in Nictor Lake is ninety-two miles distant from its mouth, and a little over eight hundred feet above sea level. The St. Francis and Madawaska originate in the Province of Quebec. and north of the great St. Lawrence "divide;" the head of the South Branch is said to be 1,808 fect above sca level, and that of the Northwest Branch 2.358 feet. but where the river St. John enters New Brunswick at St. Francis, the waters are not more than 606 feet above tide level. Assuming this latter to be the case, and the distance from the sea to be as stated above, the average slope for the cutire river within the limit of the province would be one and a half feet per mile; but as there is a descent of 117 feet in the Grand Falls gorge alone, and in the summer months practically no descent below Fredericton, the rate for the portion below the Falls becomes only eight inches, and below the city last ramed nearly nil. Thus the river becomes naturally
divided into sections, which must be considered separately, especially as these sections are otherwise in marked contrast.

The first section which is to be distinguished is that between the sources of the stream and Edmundston. The course of the river, as a whole, is here northeasterly, evidently determined by the course of the hill ranges between which it flows. It is what physical geographers call a "consequent" river, meaning that the direction is the consequence of a natural pre-existing valley and slope. It is probably also in this part an old river, as the valley alluded to is almost certainly of very ancient date. Indeed it is probably only the discovered head of a stream which originally formed no part of the modern St. John, but continued its north-eastward flow to connect with that of the Restigouche, and thus emptied into the Bay Chaleur. But the main St. John, working backward at its head, reached at last this old eastward flowing stream, and providing a new and easier channel for its waters, drew these off, leaving the Restigouche as we have it to-day, separated by a short carry only from the waters of the St. John. This is an illustration of what has been termed the " piracy" of rivers, or the "migration of divides," of which we shall presently notice some further illustrations.

Put while in one sense old, the section of the river under review is also "young," for its current is swift, its channel often narrow and V-like, its bed strewn with numerous boulders, originating more or less dangerous rapids. These boulders are old moraines, dropped across the valley's bed by the melting ice of the glacial period, and the stream is now actively engaged in removing them. It is a rejurenated stream, a strean in second childhool, striving for the sccond time to carve out for itself a smooth and mobstructed way.

Near Edmundston the main river begins to turn to the south, and we enter upon a second section extending to the Grand Falls. The wide, open character of the valiey, the gentle slope of its sides. the comparatively slow current, and the extent of intervale and islands, all indicate maturity. On the other hand, at the Grand Falls, a sudden and marked change comes in. The old pre-glacial channel, plainly recognizable in the rear of the village, where it gives convenient passage for the rails of the $C$. I'. R., having been completely obliterated by the debris of melting glaciers, the river has ever since been. and is now engaged, in making for itself a now passage. And the process is one well worth
study. The rocks to be traversed (calcareous slates which are almost limestones) are not very hard, but are of different degrees of hardness, therefore tending to determine irregularities both of course and descent. The stream is so narrow and the bluffs on either side so nearly vertical that in time of freshets the crowded waters are compelled to rise far above their ordinary level, then becoming a scene of wild commotion, at the same time that the height of the main pitch becomes materially reduced. This is ordinarily about eighty feet, while the total difference of level between the upper and lower basin, separated by about a mile of "gorge," is 117 feet. In the bottom of the gorge are the "wells," ansinteresting feature, being circular holes from one to ten feet wide, and sometimes twenty

grand falls gorge - St. John River.
feet deep, made by the grinding action of pebbles driven by the whirling waters, and illustrating one of the methods, by which the whole gorge is being excavated.

Below the Grand laalls the character of the river again changes. It comes in now transverse to the hill ranges instead of with them, as in the upper portions; and here we find the most marked evidences of that former higher level of the waters without which these ridges could never have bee: crossed. "They are in the form of terraces. steps or benches, lying a!ong the sides of the valley and following its sinuositics, but composed of materials which, 'both in character and arrangement, show clearly that they must have been laid down by the river, as similar deposits are being laid down now.

Sometimes as many as six or seven of these ter-
races will be seen one above another, each marking a stage in the excavation of the present valley, and the highest perhaps two or three hundred feet above the level of the stream, as it exists to-day.
In this third section of the river,' extending from Grand Falls to Fredericton, another feature is the deep and narrow character of the valley, the general scarcity of islands, and the rapidity of the current, all indicative of comparative youth. At the Mcductic falls probably once existed, now represented by a somewhat dangerous rapid, and here again, as at Grand Falls and the Aroostook falls, we find evidence of old pre-glacial and now abandoned channels.

Not far above Fredericton the scene is againchanged, and quite abruptly. From a width of hardly quarter of a mile it becomes twice, and in places three or four times that amount. The bordering hills are lower and their slopes more gentle, while between their base and the river channels are extensive flats or intervales, some subject to annual overflow, others like that upon which the city of Fredericton is built, reached by the water oaly under such exceptional conditions as may result from an ice jam below. Here also begin flic is'ands wh:ch at once add so much to the beauty of the river, with their elm-fringed borders, and to the revenues of their owners by their exuberant fertility. These intervales and islands indicate that the stream is here dropping its load. Wear or corrosion is on the sides not upon the bed of the stream, and the tendency to fill up makes the employment of dredges necessary. The stream has reached the "bare level of erosion," and except in times of high water the outward flow is checked or even practically reversed by the inward flow of the tide. Here again we find cvidences of a former higher level of the river, probably during the Glacial period. Beneath the surface deposits of the flat of Fredericton we everywhere reach in sinking beds of pure clay, the ascertained depth of which is over 200 feet, and from which remains of large fossil fishes have been removed. Hence the river must in some former period have flowed through a channel 200 feet lower than the present onc, and thus could only have been cut when the land stood that much higher. Having been cut, by water or ice, or both, during the period of glacial elevation, it was subsequently filled for several hundred feet with clay as the lanil strbsided, and finally, with another. but less marked clevation. cat its present bed at least 200 feet. as stated, above its former one.

The-condition of things sketched in the last paragraph continues from Fredericton to Hampstead, in Queens County, where, with the existence of rocks which are at once more enduring and more disturbed, another total change in the scenery of the river takes place. Without attempting to describe the new features in detail, I may note two or three points which are of special interest, either as exhibiting contrasts with the parts of the river already reviewed or as bearing upon its probable history.

Perhaps the most striking feature of the lower St. John is the fact that it here presents a series of long and narrow parallel troughs, connected by
ducing them as a small map, a good illustration of what is known as "trellised drainage," on account of its resemblance to trellis work as employed by the gardener. It also suggests, what is undoubtedly true, that the valleys now connected were at one time distinct, each being occupied by its own stream, and with the direction of the latter "consequent" upon that of the bordering hills; but subsequently through the backward working of the main St. John these were successively tapped or "pirated," and their waters taken to swell those of the main river.
And here another and most remarkable feature

[istands above prydericton - St. John River.
transverse depressions. The Long Reach, with its extension in the Belleisle valley, and the great Kennebeccasis trough, about twenty miles long, and in its western portions 200 feet deep, or more, are the most conspicuous examples, but to these may be added the depressions of the Washademoak and Grand Lakes, all parallel to each other, and to the great trongh of the Bay of Fundy. The comecting transverse valleys are those of Wickham, prolonged southward in Kingston Creek, the Short Reach, a continuation of the Nerepis valley, the Grand Pay and the Narrows. while indications of the same north and south depression is to be scen in the somndings in and off of St. John harbor. We have in these features, best appreciated by repro-
comes in. It its mouth the waters of the great river, with a length of nearly 500 miles, and gathered from three provinces, are met by the phenomenal tides of the lay of Fundy, the strnggle between the two being at the same time mainly confined to an area less than a mile in length, and where narrowest, not over 200 yards in breadth. Here are the " reversible falls," with the waters falling either in or ont. according as tide is high or low, white for a brief interval the turmoil which ordinarily characterizes the sene and makes the passage imponsibe is replaced by a condition of repese. during which ressels of all kiuls may safely move to and fro.

One point more. As the lower section of the

St. John river is below tide level, the waters being brackish for many miles above its mouth, while even at Fredericton there is during low water a "set back" of several inches, it follows that the valley must have been excavated when the land stood higher than now, and was afterwards depressed. It is therefore an example of a "drowned" river.

Indeed its old mouths, one at Manawagonish and the other through the Coldbrook valley, are now filled up, and the present channel through the Narrows is comparatively "young." Other provincial illustrations of "old" and " young" rivers, "rejuvenated rivers," "drowned rivers," "river piracy," etc., will be given in another chapter.


REversing falls -- St. John River.

## "The Schoolmaster Abroad."

In that admirable picture of Southern life, "The Autobiography of a Southerner," now rumning through the Atlantic Monthly, the following incidents occur:

I once read a letter written by a Southern planter to his business correspondent in Boston in the forties, asking him to send by boat "ten kegs of nails, a dozen bolts of cloth, and a well-conditionedt teacher" for his children. The teacher lay in his mind along with cloth and nails.

And Professor liilly picked up a story that told more than all the school reports. Some one asked a country woman how many children she had. "Five,--two married, two dead, and one a-teaching school."

From my boyhood I had heats our public men praise our people as the most contented and upright minder heaven, home-loving and God-fearing. But I encountered communities from which all the best Young men had gone, and nobody could blame
them; and many who were left had homes ill warth loving. Slatternly women, ill-fed, idle men, agriculture as crude as Moses knew,-a starving population, body, mind and soul, on as rich a soil as we have.
." 'Pcars dey gwine ter eddicate everybody, yaller dogs an' all," said one comntryman to another. "Presen'ly dey'll 'spec' me and you to git booklarnin', John, an' read de papers.' '

I'd lak to know who gwine ter wuk an' haul wood in dem days," said John.
"Yes: an' atter you larn to read, dat ain't all. It costs yon a heap o' money den. Yer got to buy a paper: an" did you know dat a daily paper costs six dollars a year? Atter dey larn you to read, dey don' give yon de paper, nor no books muther."Nicholas Worth, in the August Atlautic.

## Yukon District is almost as large as France.

I enioy the Review. I find it both interesting and helpful.
M. S.

## After Vacation.

'Most sincerely do we hope that your vacation will be in every way refreshing, restful, and delightful.

Vacation is never an end in itself, it is but a means to an end. Its joy and its usefulness are always involved in what comes after, in what results from it. Every conceivable privilege for enjoyment in July and August fails to provide a relish if one is fearful that the vacation will last the year round. The fact that it is to have an end, followed by opportunity for profitable employment, gives zest to the days of rest.

Assurance of an increase in salary and professional opportunity also materially adds to the joy of the long vacation. How much more joyous should a vacation be when there is a consciousness that because of it the teaching itself will be of increased value to the pupils to whom we go?

The rest feature of a summer school to a teacher of the right spirit comes from the fact that ever after she is to do better work for her pupils. She can rest better at work than at rest when her rest comes from the joyous conscionsness of that which is to come after vacation.-Selected.

## Parts of Common Things.

Here is a language lesson that will stimulate a good degree of thinking and observing if rightly managed. It will also form a basis of pupil study on the part of the teacher; it may surprise the teacher to discover how little some of the children know about matters which are usually regarded as very simple and commonplace.

Let each pupil write a list of the parts of some of the objects named in this list and others, also the use or position of the various parts: A wagon wheel, a box, a sloee, a bicycle, a knife, a desk, a coat, a plow, a rake, a hat, a window, a carriage, a book, a chair, a boat, a stove, a clock, a gun.-Selected.

Dr. Harrison, president of the University of New Brunswick, has resigned to accept a pension from the Carnegie Fund, amounting to over thirteen hundred dollars a year. The trustees of the fund also testify to the high appreciation of the services which Dr. Harrison has rendered to the canse of education in New Brunswick, a testimony that will be cordia!ly endorsed throughont the provinces.

A similar persion awaits Professor Bailey when he resigns, which it is said will not be this year.

## A Rainy Day.

The rain is falling very fast, We can't go out to play, But we are happy while in school, Tho' 'tis a rainy day,"
sang sixty-five fresh little first-grade voices. And indeed it was a rainy day. It had literally poured since daybreak, but only a few of the babies were missing. They knew that rainy days were "happy days," and had begged to cone to school; and the parents, knowing that special care was taken of them on these days, had sent them. Some had cone in delivery-wagons or private conveyances; some in the arms of father or strong elder brother; not a few had trudged through the rain and mud,-but nearly all had come, and the array of rubbers and umbrellas in the hall suggested Psyche's task of sorting the grain in Venus's storehouse, and their restorations to rightful owners seemed likely to be accomplished only by the assistance of some superhuman agent.

And true enough it was, too, that they could not go out to play. Yet a look of bright expectancy was on every face. The janitor came in, bringing a pail of water and some cups, and paused in surprisè as he was greeted by a clapping of little hands. They knew what was coming now. The janitor opened the windows, and as the signals were given all the children rose and filed past the water-pail, where each was offered a few swallows of water. After " drinking, each ran lightly to his seat, or "flew" with gently waving "wings." It required but a few minutes, yet all'were in a glow of cheerful excitement. Then, a ladder was quickly sketched on the floor, and all who cared to-and who did not? -tried to hop over all of the rounds. Many of them hopped on, and proud indeed was the small laddic who "walked clear to my seat on one foot." Quiet? No. Orderly? Yes.
A few minutes were spent in games. One division playing at a time, the other singing "Pussy White." "Chick-a-dee," and "Poor labes in the Woorl." Then, as the bell rang and the triangle soumded for the older children, the first child in each division was given a flag and they were "brave little soldiers," marching through aisjes and cloak-room and back to seats, rested and happy and ready for work.

All who did not ask to leave the room were dismissed a few minutes early, and went home wrapped up as carefully as when they came.-Sclected.

Messrs. D. C. Heath \& Company, lioston, amonnce the publication in September of The Select looms of Tenmyson, to be edited hy Archibald MacMcchan, of Dathonsie Lniversity, whose sympathetic editing of sundry mineteentli century masterpieces las given the literary world assurance of his skill.

## A Chemical Trick.

When we happen to witness a phenomenon which seems to violate natural laws, we are not likely to forget its cause if it be explained to us. The following experiment, which I devised for my students, helped them to understand as well as to remember some chemical data.

A white cat, made of flexible pasteboard and imprisoned in a glass jar, is shown to the audience. The lecturer annomnces that, without opening the jar or even touching it, he will cause the cat to modergo a zoological as well as a chemical transformation, He takes the support of the jar, and pushes it forward in full view of the students. The change occurs almost instantaneously. The cat takes a rich orange color on which black transversal stripes rapidly paint themselves. The cat has become a tiger.

The whole transformation is produced by emanations of hydrogen sulphide, which is generated in the jar itself without any visible apparatus. The cat has been previously coated with a solution of chloride of antimony wherever the orange hue was to be produced, and with a solution of basic acetate of lead wherever the black stripes were to appcar. Both solutions are colorless. After the coated cat has been introduced in his glass cage, a small piece of pasteboard is placed under the wooden support so as slightly to incline the jar forward. A few decigrammes of pulverized sulphide of iron folded in a piece of blotting paper are deposited behind the cat, on the elevated side of the bottom of the jar. Two or three cubic centimetres of diluted sulphuric acid are dropped with a pipette on the opposite side. When the performer wishes the transformation to take place, he takes the wooden support and pushes it forward as if he wanted to enable everybody to see better what is going to happen. By so doing he suppresses the slight inclination which kept the iron sulphide beyond the reach of the sulphuric acid. The gas is evolved, and the formation of the orange sulphide of antimony and black sulphide of lead takes place in a few seconds.-Gustauc Michand, D. Sc., in Scicntific American.

The iconoclasts who are so fiercely denouncing the teaching of complex fractions and the greatest common devisor are reminded that the young lady who studies difficult music is more likely to play with ease simple melodies, and that the student who has conquered a'gebra is forever after master of arithmetic.-Western School Journal.

## A Great Schoolmaster.

When Doctor Temple, afterward Archbishop of Canterbury, was head master at Rugby, writes one of his students in the memoirs of the archbishop, he relied but little upon punishment. It became the custom for the under teachers to sit with the dull and lazy boys, who had failed in their lessons, to hear them over again. Doctor Temple would try every other device before resorting to punishment.

Perhaps the most valuable lessons that the younger masters learned from him was to imitate that quality which more than anything else endeared him to the school-the love of justice. It was not only that the tradition, which dated from the time of Doctor Arnold, was insisted on that a boy's word sloould be taken, but even when there was what to a young master seemed overwhelming proof of some wrong-doing, as, for example, docmmentary evidence of dishonesty, he would stay his colleague"s hand if the boy implicated declared his innocence.

It was better. he would say, that many a wrong deed should slip through unpunished than that a single act of injustice should be done.

He insisted, too, on the fullest allowance for the possible stupidity which might have led to the result; no boy was to be punished because he had misunderstood.

It is small wonder that one of his boys, who had been exhorted at home not to be led astray from the true faith, wrote home:
"Dear mother. Temple's all right; but if be turns Mohammedan, all the school will turn, too."

Canada is thirty-nine years old, dating from Confederation; is 147 years old, dating from the British Conquest of 1759 ; is 370 years old, dating from Cartier's first visit of 1535 ; leads Britain's fortýcight colonies: was the first colony to form a Confederation; is included in forty-two of Britain's Extradition Treaties; has over 700 legislators; has had 113 governor-generals since 1534 : cast over one million ballots in the Dominion election of 1904: gives $\$ 4.402,502$ ammally to the provinces as subsidies; comprises one-twelfth of the land surface of the globe; had $\$ 15.000 .000$ surplus in 1904.

Canada contains one-third of the area of the British Empire; extends over twenty degrees of latitude, an area equal to that from Rome to the North Pole: only one-fourth of Canada's area is occupied.

Canada has enough land to give each individual 400 acres.

## A Lesson in Heroism.

The surgeons had removed the foot. It was a far more severe ordeal than Hugh had fancied, and he felt that he could not have borne it a moment longer. Though he slept a great deal in the course of the night, he woke often, such odd feelings disturbed him. Every time he moved in the least his mother came softly to look.

When she found he could not sleep any more, and that he scemed a little confused about where he was and how he came to be there, she let him talk, and thus gradually brought back the recollection of all that had happened.
"Oh," mother, I can never be a soldier or a sailor. I can never go around the world." Aud Hugh burst into tears, now more really afflicted than he had been yet.

His mother sat by the bedside and wiped his tears as they flowed, while he told her how long and how much he had reckoned on going around the world, and how little he cared for anything else in the future; and now this was just the very thing he should never be able to do. He had practiced marching, and now he could never march again.

There was a pause, and his mother said:-
"Hugh, do you remember Richard Grant?"
"What, the man who carved so beautifully ?"
"Yes. Do you remember how he had planned a most beautiful set of carvings for a chapel? He was to be well paid, his work was so superior. But the thing he most cared for was the honor of producing a noble thing which would outlive him.
"Well, at the very beginning of his task his chisel flew up against his wrist, and the narrow cut that it made rendered his right hand useless for life. He could never hold a tool. The only strong wish that Richard Grant had in the world was disappointed."
Hugh hid his face in his handkerclief, and his mother went on :-
"You have heard of Huber?"
"The man who found out so much about bees?"
"Bees and ants. When Huber had discovered more than had ever been known before about bees and ants, and was more and more anxious to peep and pry into their tiny homes and their curious ways, he became blind."

Hugh sighed, and lis mother went on:-
'Did.you ever hear of Beethoven? He was one of the greatest musical composers that ever lived. His great, his sole delight was in music. It was the passion of his life. When all his time and all his mind were given to music, he became deaf, perfectly
deaf; so that he never again heard one single note from the loudest orchestra."
"But were they patient?"
"Yes, in their different ways and degrees. Would you say they were hardly treated? or would you rather suppose something better was given them than they had planned for themselves?"
"It does seem hard," said Hugh, "that that very thing should happen. Huber would not have so much minded being deaf, or that musical man being blind, or Richard Grant losing a foot; for he did not want to go around the world."
"I think they found, if they bore their trial well, that there was work for their hearts to do far nobler than the head can do through the eye, and the ear, and the hand.
"And they soon found a new and delicious pleasure which none but the bitterly disappointed can feel."
"What is that ?"
"The pleasure of rousing their souls to bear pain, and of agreeing with God silently, when noborly knows what is in their hearts.
"There is a pleasure in the exercise of the body, -in making the heart beat, and the limbs glow, in a run by the seaside, or a game in the play-ground; hut this is nothing to the pleasure there is in exercising one's sonl to bear pain,-in finding one's heart glow with the hope one is pleasing to God."
"Shall I feel that pleasure?"
"Often and often, I have no doubt,-every time you can willingly give up anything you have set your heart upon. Well, I don't expect it of you yet. I dare say it was a long and bittèr thing to Beethoven to see hundreds of people in raptures with his music when he could not hear a note of it. And Huber-"
"But did Beethoven get to smile ?"
"If he did, he was happier than all the fine music in the world could ever have made him."-Harrict Martincau.

One of the most successful devices I have used to interest boys in the writing of business letters is to give each child an illustrated magazine, allowing him to answer any of the advertisements he wishes. This is much more interesting to the average pupil than the prescribed course on letter-writing given in most texts on language.

The rural teacher who finds it so difficult always to secure fresh material for busy work will find that she can put to almost innumerable uses, the glazed paper samples of paints and varnishes which one can secure at paint or drug stores for the asking. These come in all the bright colors that appeal to the children. They may be used for counting; for simple designs drawn on the board and the children copy on the desk with these; or simple designs may be made from them. Just give the children a handful of them and they will be quiet for sone time.'Teachers' Magazine.

## Selected Readings

## Counting the Stars.

(From Stickney's Third Reader, by permission of Messrs. Ginn \& Co․, Boston. the publishers.)
Robert was offered a dollar by his grandfather if he would count the stars. The night was clear, and there was no moon. Robert thought he might as well begin at once. He had no special interest in the stars, but a dollar had great possibilities in it for him.

The boy lay on his back on the soft, cool grass, so as to see all the sky at once. He guessed there might be a hundred stars, and that there would be a cent for each star that he counted. An hour was allowed him for the, work, as it was then eight o'clock. He thought it quite sufficient. Some time was spent in deciding where to begin; but as Venus was the evening star at that time, it seemed a good one to earn his first pénny upon. His mother thought so, too. Mothers can usually be depended upon to encourage the etforts of their children, and he thought he would like to have his mother coun1t also. Robert was an honest boy, and he was sure that he ought to count as carefully as his father had to count bills at the bank, not missing a single one. There was a long silent time.

Robert's mother had not believed he would be so persevering. She did not speak till' she heard a sigh and knew that he had stopped counting. "Have you lost count?" she asked. "Yes," was the answer. "I'm all mixed up, I'm afraid I shall have to begin over again." "Oh!" said his mother in a sympathetic tone. "There are so many of the little ones," Robert added, "and there are no lines to go by. How did you get on?" he asked. "I worked in another way and counted till I reached a hundred; then I think I lost count also. I began, as you did, with Venus, and then looked for the other two planets, Jnpiter and Mars. We do not always have three planet visitors in sight at the same time. [Mars is now visible and Jupiter is seen in the morning sky.-EDrtor.]
" Then I went all over the sky for the largest stars-stars of the first magnitude they are called. There were seven of them. That is a good many to have at once. The last time I looked for them there were only six, and in the whole year there would be only fourteen. It is not so easy to count the stars of the second magnitude, of which there are forty in all. I found about twenty, and then began back at Venus to count smaller stars."
"It will take another evening," said Robert, " to go all over the sky; I think I had better stop now."

It was a month or two before Robert made his second attempt to number the stars.- His mother had pointed out to him in the meantime the stars of first magnitude-he had learned to find Vega and the bright star Sirius himself, and had had Regulus and Castor and Pollux pointed out several times.

When Arcturus came first in sight in the eastern sky (it is now in the west), he was as much interested as his mother; so, when his grandpapa said one night at tea time, " I want you to have that star dollar, Robert!" he asked to be allowed to sit up till it was dark enougli for the stars to be bright:
"Will you show me how to count your way, mamma," he asked. "We will take a better way," was the answer. "I showed you the Great Dipper, the Seven Sisters, Orion's Belt, and the Sickle. We will look for more groups of stars. . Then if you have to stop, you will not need to begin at the beginning again.
" Groups that make figures in the sky are called constellations. There are a good many. The whole sky is overspread with them. When I was a little girl, grandpa taught me to find them, and mey seem like old friends that meet me wherever 1 go. I think you will like to get acquainted with them. David, the shepherd boy of Bethlehem, knew them, and perhaps Moses did in Horeb."

Robert soon became so interested in tracing constellations that he forgot all about counting, till his mother reminded him that they had found six stars in the sickle in Leo and three in the triangle; the great square in Andromeda had seven, and in Orion he had found no less than thirteen; in the scorpion there were cighteen, and it took seven to shape the Great Dipper, all but one of them being second magnitude stars. Next was Draco, the dragon, with twelve', and close by the Little Dipper with scofn. Cassiopeia, Bootes, Hercules and Gemini, which he thought he saw when his mother traced them out for him, easily made up the hundred he thought he was to count at the beginning; and his mother hurried him off to bed before he had time to wonder if his grandfather would think he had earned his dollar.

[^19]
## Beauty of Nature.

Is it for nothing that the mighty sun
Rises each morning from the Eastern plain
Over the meadows fresh with hoary dew?
Is it for nothing that the shadowy trees
On yonder hilltop, in the summer night
Stand darkly out before the golden moon?
Is it for nothing that the autumn boughs
Hang thick with mello fruit?
Is it for nothing that some artist hand
Hath wrought together things so beautiful?

Beautiful is the last gleam of the sun Haunted through twining branches; beautiful The birth of the faint stars, first clear and pale The steady lustered Hesper, like a gem On the flushed bosom of the West; and then Some princely fountain of unborrowed light.

## Dawn.

I had occasion, a few weeks since, to take the early train from Providence to Boston, and for this purpose rose at two o'clock in the morning. It was a mild, screne midsummer's might; the sky was without a cloud; the winds were whist.

The moon, then in the last quarter, had just risen, and the stars shone with a spectral lustre, but little affected by her prescuce. Jupiter, two hours high, was the herald of the day; the Pleiades, just above the horizon, shed their "sweet influences" in the east; Lyra sparkled near the zenith; Andromeda veiled her newly discovered glories from the naked eye in the south; the steady Pointers, far beneath the pole, looked meekly up from the depths of the north to their sovereign.

As we proceeded, the timid approach of twilight became more perceptible; the intense blue of the sky began to soften; the smaller stars, like little children, went first to rest ; the sister beams of the Pleiades soon melted together; but the bright constellations of the west and north remained mchanged. Suldenly the wondrous transfiguration went on. Hands of angels, hidden from mortal eyes, shifted the scenery of the heavens; the glories of the aight dissolved into the glories of the dawn. The blue sky now turned more softly gray; the great watch stars shut up their holy eyes; the east began to kindle. Faint streaks of purple soon blushed along the sky; the whole celestial concave was filled with the inflowing tides of the morning light, which came pouring down from above in one great ocean of radiance, till at length the everlasting gates of the morning were thrown wide open,
and the lord of day, arrayed in glories too severe for the eyes of man, began his course.

I do not wonder at the superstition of the ancient Magians, who in the morning of the world went up to the hilltops of Central Asia, and, ignorant of the true God, adored the most glorious work of His hand.-Edzuard Eicrett (Adapted).

## Instinct in Insects.

Let us note for a moment a butterfy's egg-laying business, the most important of its life. To ensure the continuance of the species the ova must be placed where the young caterpillars will at once find proper nourishment on hatching out. The average lifetime of a butterfly varies from two to four weeks (non-hybernating species). During the latter end of this period the eggs have to be placed on the plant or tree peculiar to the species. Now this plant (as a rule) has no attractions whatever for the perfect insect in its winged outfit until the ova are ready for deposition; but, once the time has come, the mother butterfly never fails to find out the right plant, on which she deposits her eggs just when the young leaves are beginning to sprout. The performance is even more remarkable when, as is sometimes the case, there is only one species of plant suitable. Here, then, we have an instance of pure instinct: for secing that the larve are sightless, they can form no olservations of locality, nor even of the appearance of the food plant.- $C$. Bingham Necoland, in Littell's Lizing Age of August 15.

## The King.

The folk who lived in Shakespeare's day And saw that gentle figure pass By L,ondon Bridge, his frequent wayThey little knew what a man he was.

The pointed heard, the courteous mien,
The equal port to high or low,
All this they saw, or might have seenBut not the light hehind the brow!

The doublet's modest gray or brown, The slender sword-hilt's plain device, What sign had these for prince or clown? Few turned, or none, to scan him twice.

Yct 'twas the king of Englands' kings!
The rest with all their pomps and trams
Are moldered, half-remembered things-
'Tis he alone that lives and reigns!
-T. B. Aldrich.

## Somebody's Mother.

The woman was old, and ragged, and gray, And bent with the chill of the winter's day; The strcet was wet with a recent snow, And the woman's feet were aged and slow.

She stood at the crossing, and waited long,
Alone, ancared for, amid the throng Of human leings who passed her by, Nor heeded the glance of her anxious eye.

Down in the street, with laughter and shout Glad in the freedom of "school let out," Came the boys, like a flock of sheep, Hailing the snow piled white and deep. Passed the woman so old and gray Hastened the children on their way,

Nor offered a helping hand to her, So meek, so timid, afraid to stir Lest the carriage wheels, or the horses' feet, Should crowd her down in the slippery street.

At last came one of the merry troopThe gayest laddlie of all the group; He paused beside her and whispered low, "I'll help you across if you wish to go."
Her aged hand on his strong, young arm
She placed, and so, without hurt or harm, He guided the trembling feet along, Prond that his own were firm and strong.
Then back to his gay young friends he went, His young heart happy and well content.
"She's somebody's mother, boys, you know, For all she's aged, and poor, and slow.
"And I hope some fellow will lend a hand To help my mother, you understand, If ever she's poor, and old, and gray, When her own dear boy is far away."
And "somebody's mother" bowed low her head In her home that night, and the prayer she said Was: "God be kind to the noble boy, Who is somebody's son, and pride, and joy."
-From Harper's Weckly.

## There's Work to be Done.

'Tis the song of the morning, The words of the sim,
As he swings oer the mountains:
"There"s work to be done.
"I must waken the sleepers, And banish the might;
I must paint up the heavens. Tuck the stars out of sight.
"Dry the dew on the meaclows, I'nt warmetl in the air.
Chase the fog from the lowlands. Stay ghom everywhere.

## "No pausing, no resting,

There's work to be done.
It is upward and onward,
Still on," says the sun.
-Ella Wheder Wilcox.

## Gleanings from New Books.

## First Steps in Arithmetic.

Counting should begin with quite small numbers, and should not proceed beyond a dozen for some time, but there is no object in stopping or making any break at ten. Several important facts (the facts only, not their symbolic expression) can now be realized: such as that $3+4=7$, that $7-4=3$, that two threes are 6 , and that three twos are the same, without sny formal teaching beyond a judicious question or two .... Formal teaching at this stage should be cschewed, since it necessarily consists largely in coercing the children to arrive at some fixed notion which the teacher has preconceived in his mind-a matter usually of small importance. The cluildren should form their own notions, and be led to make small discoveries and inventions, if they can, from the first. Mathematics is one of the finest materials for cheap and casy expcrimenting that exists. It is partly ignorance, and partly stupidity, and partly false tradition. which has beclonded this fact, so that even influential persons occasionally speak of mathematics as "that study which knows nothing of observation, nothing of induction, nothing of experiment." A ghastly but prevalent error which has ruined more teaching than perhaps any other misconception of the kind.

From "Easy Mathematics" by Sir Oliver Lodge, F. R. S. (The Macnillan Company of Canada, Toronto).

## Two Methods of Training.

I have had opportunity to observe for a number of years the development of two families where different methods of training the young are followed. The five children in the first fam:ly have ben continually repressed; they have been taught to sit still, and not to speak until they have been spoken to. They are compelled to be quiet in the house, and they are forbidden to play on the street. Their parents never think of indulging in a game with them. They are provided with no materials at home or at school by which they can indulge the constructive instinct. The parents are guided solely by the static ideal of good behavior.

In the other home the training is quite different. Spontanicty is indulged. The father and mother and governess themselves help to carry forward the enterprises of the young ones. Various devices are invented to counteract the unfavorable conditions of the city, so that the children may dig in the sand and climb and build and reproduce in various ways the activities that go on about them.

The effect of these different modes of training is apparent in the conduct of the children. In the first family the chiddren "behave themselves" better than in the second.

## NELK BOOKS

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They "keep still" and "let things alone." Whenever they are thrown in with other children, thongl, they appear ill at ease, and often. spend their time merely looking at others who are doing things. They seem quite reserved, timid, resourceless. Their faces show lack of originality, independence, freedom, But some of the ne:ghbors say they are "well trained," "welf disciplined" because they are not getting into mischief constantly.

The children in the second family, however, are active in any situation in which they may he placed. They conditet themselves as though the world existed to furnish them occasion for activity. They are never at a loss for something to do. The neighbors speak of them, though. as noisy and ungoverned, because they will not sit still and gaze at the world. Their parents find consolation in the belief that as they increase in experience they will have less desire to be testing everything. They expect them to grow more thoughtful and so more restrained. Already, indeed. the eldest child of nine spends of her own accord several hours every day over her story books and drawing and writing and various manual activities
-From "Dynamic Factors in Education," by M. V. O'Shca. (Macmillan Company, New York)

## On the Advantages of Talking

" 1 am a bit hothered in $m y$ mind on the question of talking." announces the precocious young lady whose career is recited in Barry Pain's delightfully humorous "Diary of a Baby," beginning in the September Dcincator. "Shall I talk or shall I not? I suppose it has got to be one way or the other. In the place from which I came, the Herebefore, there was no talking. I remember that distinctly, though the rest of my recollections of the Ilerebefore are getting vaguc. In my younger days, when I was a fortnight old, I could have told you everything about the Herebefore, but most of it has slipped from my mind now. I suppose one's memory fails with advancing age. Still I remember distinctly that in the Herebefore we never talked. Why should we have talked? We understood one another perfectly withont making noises. Even now. I could hold a long discussion with a babe of my own age or younger without making sounds. The trouble is with the grown-up people they seem to have lost the knack of it. They can't say things without talking. I shalf have to talk. If you do not express what you think, grown-up people suppose that you can think of nothing to express. The experiment would be easier if the grown up people would only talk to

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me as they talk to one another. As a rule they use a special language for me. Papa is an exception. He always calls me Rosalys, and speaks to me as if I were a lady of his own age. Mama never calls me Rosalys and seems to perfer some elaboration or distortion of the word duck. She has called me a duckletina, which sounds something like a new disease. I know that Mama ought not to talk in this way. It is not right, and 1 should certainly correct her."

In 1867, Thomas D'Arcy McGee contested Montreal as a candidate for its representation in the House of Commons. He was bitterly opposed by the Fenian element among his own countrymen. Apparently his death was then decided upon, and a few months afterwards he was murdered. The assassin was discovered, arrested and condemned to death. A Fenian rescue was expected, and two hundred Ottawa citizens took the precaution to attend the hanging to see that justice was not interfered with. The details of the story are entertainingly told in the August Canadian Magazine by J. E. B. McCrcidy, the veteran journalist, who was in Ottawa at the time.

## CURRENT EVENTS.

I lake of quicksilver, covering two or three acres of land, is said to have been discovered in Mexico.

Most wonderful accounts of the richness of the ore continue to come from the Cobalt mining regions.

The manufacture of alcohol for fuel is likely to become an important business. It is already carried on to some extent in Europe, where potatoes are the chief source of supply.

The Russian cabinet has decided that the number of primary schools in Russia should be increased, and the salaries of teachers advanced. A bill for universal primary education will be laid before parliament at its next session.

The elections for the new parliament are now taking place in Russia, and it is reported that the results are such as to amply justify the government's appeal to the people.

Over two thousand physicians were in attendance at the recent meeting of the British Medical Association in Toronto. Some amusement was felt on receiving from England, on one of the very hottest days of summer, a case marked with the request that its contents sloonld be protected from freezing.

There is fresh trouble in the Balkans. It arises from disputes between Greek Christians about the control of Greek churches and schools in Macedonia. The ecclesiastical anthorities in Greece claim jurisdiction; but Rommanian and Bulgarian Christians

# The Provincial Educational Association of Nova Scotia 

Will meet at the

## HALIFAX ACADEMY, HALIFAX, September 25th, 26th, 27th.

There will be three morning sessions and one or two evening sessions. Much timo will be devoted to

## Discussion on the Adjustments of the Course of Study Demanded by Modern Conditions

[^20]A. MCKAY, SECRETARY.

who belong to the Greek church resist the claim, so far as it affects residents who are of Roumanian of Bulgarian nationality. Roumania is too far away for active interference; but bands of armed Greeks and Bulgarians are supporting claims of their respective partizans, while the Turkish government seems quite willing to let them fight it out among themselves, and declines to interfere.

A new metal, tantalite, is said to be so hard that a diamond drill makes no impression on it.

Farm laborers from the United States are flocking into Western Canada. They are all needed to harvest the abundlant crops.

Wellman, the Chicago explorer who had planned to start for the North Pole in a dirigible balloon, has abandoned his purpose for the present.

Now that Jews are again permitted to settle in Palestine, a large influx from Russia and the Balkan States has begun. The immigrants are taking up land chiefly on the east of the Jordan. and finding it rich and productive.

A new constitution for the Transvaal gives equal rights to Boers and Britons. Either the English or Dutch language may be used in the transaction of public business.

An carthquake as great as that of San 1 rancisco, and with hardly less appalling results, has visited the Pacific coast of South America. Half the city of Valparaiso, is in ruins, and many smaller towns have suffered severely. Valparaiso, with a population of 160,000 , was the chief seaport on the coast, and the terminus of important lines of steamers. The Chilean goverument took immediate steps for the relief of the inhabitants, placing Valparaiso under military rule, and authorizing the provincial governors to expend all the public money needed for relief work in their several districts. The cold of midwinter adds to the sufferings of the homeless people.

Will the name of Acadia be restored to our maps? The Maritime Board of Trade has again passed a resolntion in favor of the union of the provinces that once bore that name.

A number of mines in the Kootenay region of liritish Columbia which were abandoned as unprofitable, will resume operations this year, owing to the increased price of metals and the decreasing cost of mining and smelting.

It is now proposed to comect Newfoundland with Canada by a railway tumel under the Strait of lielleisle.

Persia is to have a national assembly, for the first time in its history: It will meet at Teheran, and will have control of all civil laws, which will become effective on receiving the signature of the Shah.

A method of tempering gold has recently been discovered, and this metal will probably be used for surgical instruments, because of its being noncorosive.

It may be possible to predict earthquakes as sure1y as we can now foretell storms. The recent Sonth Àmerican earthquake had been foretold by scientists some days before it occurred.

The Dowager Empress of China has called a convention to formulate plans for a constitutional grovermment.
Newspapers in the Cinited States, as well as elsewhere, are suggesting the possibility that the insurrection in Cuba may be made the occasion of intervention and the uttimate annexation of the istand by the Lnited States. To this neither party in (iuba would willingly submit; for the unfortmate inhabiants of Porto kico have fonnd that they are worse off under the government of the Laited States, of which that island is now a part, than they were whon it formed a part of the Kingtom of Spain.
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The boundary dispute between Canada and Newfoundland is of more importance than might be supposed. The Quebec government claims that the Labrador littoral under the jurisdiction of Newfoundland is a narrow strip of coast extending about one hundred and fifty miles north from the southern end of the Strait of Belleisle. The extreme claims of the island colony are understood to be that all the country east of the Labrador watershed, or all the land drained by rivers that flow into the Atlantic, comes under its jurisdiction; or, if any definite boundary is to be recognized, the


Height of Land.....
Bundary Clamed by Quebect
Boundary Clamed by Newfound land
portion of the peninsula of Labrador annexed to Newfoundland is bounded by a line running due sonth from Cape Chudleigh to the fifty-second desrce of north latitude, thence easterly along the fift y -second parallel to the longitucle of Blanc Sablon, thence sontherly to the shore of the strait. The valuable timber land atong the Hamilton River and its branches is the most important joart of the territory in dispute: but it may be a matter of much consefuence in the future whether the Ungava territory is to lave Atlantic harbors, or is to be closed
in along the whole Atlantic coast of Labrador, as the Yukon is cut off from access to the Pacific by the narrow strip of Alaskan territory.

One of the largest irrigation schemes on the American continent is that of the Canadian Pacific Railway Company for the extensive area between the Red Decr River and the Bow River east of Calgary. Canals are already completed to furnish water for irrigating over a hundred thousand acres.

The electric smelting or iron ore having proved successful in Canada, the plan will be adopted elsewhere. Electrical smelting works are to be established in the United States and Mexico without delay.

The Colorado River was to be in part diverted from its course, a few miles north of the Mexican line, to irrigate lands lying in the bed of the old lake; but the engincers failed to take proper precantions, and the entire volume of the river is now rushing through the artificial channel. It has washed away a small Mexican town, and is endangering miles of the Southern Pacific Railway. Unless control is regained, which seems improbable, it will ultimately fill up the depression estimated to be some two thousand square miles in area; and when that is done, perhaps thirty or forty years hence, will find a new ontlet to the sea.

Gold, silver, copper, nickel and iron ores of wonderful richness have been discovered in the Lake St. John region of the Province of Quebec. A railway will be needed to make the mines easily accessible.

A small insurrection has broken out in Cuba, and a more serious one in Santo Domingo, where the United States has stationed six war ships to prevent the success of the revolutionists.

The Canadian steamer "Arctic" has sailed for the Polar regions, and is expected to return in a year and a half. Captain Bernier, who is in command, will plant the Canadian flag on all islands and mainland points which he may discover, claiming them as parts of the Dominion of Canada.

It is denied, apparently on good authority, that the ship "Birkenhead." which was built at St. -ndrews, N. R., in 18 f1, was the troopship of that

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name that was lost on the coast of Africa. The Review's authority for the statement thus contradicted was local tradition, confirmed by an assertion of the son of the master workman that the ship his father built was taken to England and sold as a troopship. Further inquiry may show that there were two ships of that name.

## SCHOOL AND COLLEGE.

Miss Kate R. Bartlett for several years an efficient teacher in the St. John High School, has been appointed teacher of domestic science in the Halifax Ladies' College, after a full course at the Macdonald Institute, at Guelph, Ontario.
Mr. Roy D. Fullerton, B. A., of Port Elgin, N. B., has accepted the principalship of the Grand Forks, B. C., school.
Mr. W. H. Coleman, B. A., of Moncton, has leen appointed to the position on the staff of Mount Allison Academy formerly held by Mr. W. A. Dakin, M. A.; and Mr. F. H. W. Holmes, graduate of the Ontario Business College, has been appointed head master of Mount Allison Commercial College. Another vacancy on the Academy staff has beens filled by the appointment of Mr. Goldwin S . Lord, late principal of the sehool at Grand Harbor, Grand Manan.

Mr. L. H. Baldwin has been appointed principal of the St. Gcorge schools.
The school trustees of Hampton have received authority to borrow $\$ 15.000$ to build a consolidated school.
Mr. N. W., Brown has been appointed inspector of schools for York and Sunbury, to fill the vacancy created by the appointment of Inspector Bridges to the principalship of the Normal School.
Dr. H. T. Bovey, Dean of the Faculty of Appliect Science at McGill University, has been elected an honorary fellow of Quten's College, Cambridge.
Miss McAdam, who has returned from a visit to Europe, will resume her duties as head of the primary department of the Charlotte Street School, Fredericton. Miss A. L. Taylor, of the same school, has asked for leave of absence.
Miss Pickle will have charge of the manual training deparment in the new consolidated sclool at Florenceville. The manual training department at Hillshoro will be in charge of Miss Keith, of Havelock; and that at Chipman in charge of Miss Currier, of Upper Gagetown.
Miss Mary E. Caswell has resigned her place on the staff of the St. Steplen school, for a meeded rest, and will be suceceded by Miss Shaughessy, lately teaching at Oak Bay. Niss Jessic Henry is to resume her place on the taff, after a year's leave of absence.

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Educational Revicw Wupplement, October, 1906.


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| a. U. HAY, <br> Editor for New Brunswick. |  | A. McKAY, <br> Editor for Nova Scotia. |

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Hnd so let us give thanks to God uyon Chanksgiving Day. nature is beautiful, and fellowmen are dear, and duty is slose beside us, and $\overline{\mathrm{h}}$ is over us, and in us. What mere do we want, except to be more thankful and more falthful, less somplaining of cur trlals, and our time, and more worthy of the tasks and privileges Fe has glven us.

Phillipes brooks.
Thanksgiving Day, Thursday, ()etoher isih.
Reports fron county teachers' institutes are held over until the November mumber.

Otur picture for this month-"A Scrateh I'ack"speaks for itself. It is sure to interest the childrem.

Dr. Inch's amouncement concerning the bimpire Day prizes offered by Lord Meath should have many interested reaters among the school chidelen.

Dr. A. H. Mackay's address at the opening of the IIalifax Convention was a temperate and exhanstive argument against compulsory Latin, and a strong plea for an education in sympathy with the environment of the pupil. The fight over the Latin question ented in a compromise, in which a high school course of four years is recommencled, with a choice to the pupil of six out of seven subjects a year; and one other languages than English compulsory after the first year.

Mr. Ronsevelt is being sharply criticised by many educational and other papers, because he has approved of a list of some three landred words whose spelling he proposes to change in printing the public documents of the Linited States. To do him justice, all the changes upon which he has set his seal of authority hase been debated by orthographers and dictionary-makers the world over. but he has shown scant wisclon in isstuing a ukase on the subject. English-speaking people camnot be legislated into bow they shall spell their language. That comes from thage-that contintious, inexorable law which laughs at the fiats of princes or presidents who would put a whole system in operation instead of merely expressing themselves in favor of it, if it suits them to clo so.

That industrious and aceomplished student of local history, Rev. 1)r. Raymond, has begun a series of artic!es on the carly history of Woondstock, Which are now being phblisher in the Dispatch. The series promises to be of interest and value. The following extract shows that some sources of foor among the Futians are still to be obtaincel in that locality, as in others thronghont these provinces:

The roots used by the fodians for food still grow on the intervakes :mel islands at Woodstock. Among them are the dpios huberosu, sometimes called ground nuts or Indian putatoes; the plant comes up late in the season, the rewts grow in clasters and atre very palatable; they formed ons of the staple articles of food anong the ahoreigimal tribes. Another foot trsed for ford was that of the yellow lily (Litium Conadellse) which is still very al tudant on the intervales amd inlams. Smother edible roen was that of the Cloylonion lirginica, or "Spring beanty:'

Professor C. C. Jones, Jate of the chair of mathematics, Acadia University, has been appointed Chancellor of the University of New Brunswick and professor of mathematics. The appointment is regarded as an excellent one. The new chancellor, who has just entered on his duties, is a distinguished mathematician and is possessed of energy and executive ability. He is thirty-five years of age, a native of New Brunswick, and a product of its public schools and university, having risen step by step, taking in succession the degree of A. B. (1898), M. A. (1899), and Ph.D. in 1902, from the University of New Brunswick. In addition he has pursued his mathematical studies at Harvard and Chicago universities. He is a man of fine physique, of pleasing address, and scholarly attainments. High hopes are entertained that under his wise management the University will enter upon a fresh career of success.

It was with deep regret that all classes of people in New Brunswick learned that ex-chancellor Harrison's illness was likely to prove fatal. After his resignation of the chancellorship of the University of New Brunswick, in the latter part of August, his health quickly declined and he passed quietly away on the 18 th of September, in Fredericton, the scene of his work for more than a third of a century. Dr. Harrison was of Loyalist descent and was born at Sheffield, Sunbury County, October 24th, 1839. He was educated at Trinity College, Dublin, taking honours in Mathematics and the degree of LL.D. In June, 1870, he was appointed professor of the English language and literature and of mental and moral philosophy in the University of New Brunswick. In 1885 he became its president. He was a man of a genial and kindly nature and held in high esteen by all who knew him.

## School Flags.

Premier Roblin of Manitoba in a recent speech at Winnipeg said:
The provincial government 1ras decided that after the first of January, I907, every school of this province must have a Union Jack flying during school hours. The government will provile the flag, and it will be the duty of the trustees to replace anys such flag that may have become useless. The rule of the department will be that any school teacher or board of trustees that neglects or refuses to float a Union Jack in school hours will forfeit their right to the pullic grant. I trunt that in making this move we will not be misunderstood. We wellome the varions peoples that come to entr forvince, who are born under forcign flags, who speah a different thyue, and we give
bex.
them the benefit of our civil laws; endow them with civil rights; the benefit of our criminal law; the free education of the schools, all of which are the outcome of the civilizations and benefits that follow the Union Jack, and I think that the man who comes from a foreign country in order to better circumstances, and objects to perpetuating the glories of our flag, who declines to have his children infused with British patriotism, is a man that is undesirable.

Many schools in these provinces are the prond possessors of flags, which are floated on public days and holidays. Such schools are generally those with some pretensions to architectural beauty int the school building and with grounds more or less well laid out. The flag and pole, having been purchased by the joint efforts of the teacher, scholars and ratepayers, it perhaps regarded with more affection and interest than would be attached to a "regulation" flag. But we should like to see the Manitoba practice become general-a Union Jack flying from every school in Canada during school hours.

## Address to Young Teachers.

The following is an abstract of the address of Dr. William Crocket, late principal of the N. B. Normal School, at the close of the recent session of that institution. The words are kindly, sympathetic and full of encouragement to young teachers, befitting the character of that distinguished teacher who for so many years has influenced the lives and destinies of the many men and women trained by him. Like other true teachers he has found his greatest interest in his work, and his greatest happiness has been in imparting that spirit to others.

After complimenting the students upon their deportment and general work, and wishing them success in their future career, Dr. Crocket spoke somewhat as follows:
"You are now abont to assume the duties for which you have been here to prepare yourselves, and I hope that the promise which many of you have given by diligence and devotion to your studies, will in some measure at least be realized. You will, I trust, seek to give effect to those principles of teaching and school management, which have been discussed and practically illustrated. Whatever methods have been adopted in illustration of them, have been but the outcome of the principles themselves. A principle, as you know, does not vary, but the application of it may assume many forms. The form or method you adopt, however, must be such as shall meet the needs of you pupils and one which you yourself thoroughly understand and can readily apply. Inexpericuced teachers very often
merely copy a method which they have seen, without apprehending the principle upon which it is based or considering its adaptation to the needs of their pupils, and hence their work becomes dull and mechanical. Let your method be founded upon well established principles and suited to the mental development of the pupil, in the very nature of things you will awaken interest, and thus arouse the mind activities, which is just what every true teacher aims at. Let this be your prime object and not the pouring in of knowledge which so many unthinking people regard as the chief end of school education. It is only by proper methods that that knowledge which is serviceable, can be secured, knowledge which the people can apply, knowledge which urges the pupil to ask, like Oliver Twist, for more.
"The Board of Education, as you are aware, puts a high value upon method. Among the important duties of Inspectors, it prescribes that they shall demand on the part of the pupil, an intelligent acquaintance with the subjects; this result camnot be attained without proper methods. It is further prescribed that they shall observe the methods of the teacher, and thereafter (privately of course) give him such counsel as they may deem necessary. The reports of their visitations are to be forwarded to the Education Office on the first teaching day of each month, when the Chief Superintendent is treated no doubt to a considerable amount of miscellancous reading. Again the Board has prescribed that discussions at Teachers' Institutes shall relate chiefly to methods of teaching and management, and has also made provision for teachers visiting other schools for the purpose of observing the methods practiced therein. All this shows how important a subject method is, and how necessary it is that a teacher should practice right methods, and thereby train his pupils to become observing and thinking men and women.
"Important as method is, however, I consider that a teacher's mamer has more influence over his pupils than the propricty of his methods. Method of teaching is an art and a valuable one, but the teacher needs to put a soul into it to bring out its value. It is the spirit that quickeneth; art without it deadens. When Dickens was shown a picture which many admired, he said, 'it wants that'-life and inspiration- 'and wanting that it wants everything.' So a dull, sullen, lifeless teacher, however proper his method may le, can no more impart life than a lifeless machine. Iiy a bright lively manuer, I to not mean a noisy bustling oue which always reflects itself in the conduct of the pupils,
but that kind of energy which arises from a conscientious discharge of duty and makes its influence felt in every part of the school-room. A cheerful countenance-not glamour-but that cheerfulness which comes from the heart-casts its radiance all around, brightening up every face and making the pupils pleased with themselves and with every one else, makes the school a happy place and all school work pleasant.
"Of all the qualifications of the teacher, however, none exert inore influence than sympathy. How readily we all respond to the wishes of those who we know sympatliize with us. It is even more so with the young. They take pleasure in their school work because they know that it will please the teacher who takes such an interest in them. And, let me say, this interest should be taken not only with the pretty and well dressed boys and girls, but in those of forbidding aspect as well. Strangers they often are to kindly treatment even at home, and looked upon by almost every one as little Ishmaelites. In the schoolroom, let them come under the gentle touch, the pleasant smile and the influences of a kindly heart, and the clances are that they will grow up useful members instead of pests of society, and with fond recollections and with what heartfelt gratitiude will they look back to the days spent under your tuition. But, you will say, who is sufficient for these things? Not everyone, but those who have a lofty ideal of a teacher's duty, who are prepared to sacrifice their own interest for the good of others, will help the bringing of 'better manners, purer laws, the larger heart, the kinder hand.'
"Go forth, then, with a brave heart to the work which lies before you. Notwithstanding many discouragements, which all experience more or less in every sphere, you lave much to encourage you. You have friends to cheer you on. You have the consciousness of being engaged in a useful and honorable calling-a calling which, with skill and devotion, will bring you reward. I do not say, material rewards-but rewards higher and more enduring in the grateful remembrance of pupils and their friends, and above all in the conscionsness of duty well donc.
"Finally let your aim be to give to the duties you have undertaken as you share in the world's work, the first and highest claim upon your time, your strength and your talent, carrying about with you the consciousness of an unseen and a higher power encompassing you, and your reward will be the reward of the faithful laborer. Go forth then in this spirit, and the blessing of God go with you."

## Our Rivers and Lakes.

By L. W. Bailey, LL. D.

In a previous paper the St. John river was taken as illustrative, in different portions of its course, of what geographers mean by the "life of a river," i. c. the conditions of youth, maturity, old age and second childhood, of conflict with other streams, of struggle for existence, of sirvival or extinction. We may now seek to see how far these same features of river life find illustration in other streams of New Brunswick and Nova Scotia.

Most of the smaller streams in both provinces are "young"; naturally'so because, as with living things, diminutive size is the natural accompaniment of beginning development, and such streams still have the greater part of their work before them. In New Brunswick they are the sources of supply and of power for all the larger rivers, and may be seen in every part of the Province, forming chanels of communication for the canoeist or sportsman, water-ways for the driving of lumber, preserves for the delight of the angler. In Nova Scotia all the streams are young. Most of them probably have originated since the Glacial period; the larger part of them start in drift dammed lakes; their chamels are shallow and difficult to ravigate even for a canoe.
But portions of large rivers, as shown in connection with the St. John, may also be "young," and streams which are now comparatively small are in some instances the dwarfed and sunken representatives of those which in their earlier history may have been of far greater volume. A few illustrations may make this subject clearer.

Taking first the tributaries of the St. John, the (irand Green and Tobique rivers are for the most part young, with narrow valleys, steep slopes, rapid currents and few islands or intervales. The Narrows of the Tolique and the lower portion of the Aroostook also show, like the gorge of the Grand Falls, examples of streams diverted from their original chamel, and by the loss of the latter, compelled to carve new ones, a work in which they are still actively and vigorously employed. The Nashwak also, from its source to Stanley, gives similar evidences of "youth." ()n the other hand from Stanley to Fredericton the river valley is broad, the current sluggish, the intervalns brand and islands numerous, all signs of "maturity." The Keswick presents similar features, but here the present small strean slows a singular dispaingortion to the broad open valley which it traverses. The explamation of
this is to be found in the fact that what is now the course of a minor tributary of the St. John was formerly, in part at least, that of the main river. This is in accordance with what has been said in a previous chapter as to the changes which rivers often undergo in the course of their history and of which some other provincial examples will presently be given. As regards the remaining tributaries of the St. John it will only be necessary to say here that the Oromocto, especially below its forks, is a good illustration of a mature or even of an old stream, its deep waters flowing with hardly a perceptible current and with a valley subject to frequent submergence as the result of the freshets and back flow in the main river. The Newcastle, with its expansion in Grand Lake and outlet by the Jemseg, presents similar features, as do also the Washademoak, Belleisle and Kennebecasis, streams, as before explained, once quite disconnected, but later united into a system of "trellised drainage" by "piracy" upon the part of the main St. John.
The streans of the southern coast, including the Magaguadavic, New, Lepreau. Musquash, Mispec, Salmon, etc., are alt obvious! "young"-their work of excavation being still in full operation and their val!eys, especially to the eastward of St. John, having something of the character of canons, with rapids and falls innumerable. The Petitcodiac is an exception, but its peculiar features are, like some of those of the lower St. John, largely determined by its relations to the sea. It is a stream of which the lower half is twice a day "drowned" by the influx of the tide.

It remains to say a few words as to the streams which drain the eastern sea-board. Of these the Restigouche, to its junction with the Metapedia, is "young," occupying a valley which is almost like a gash in the great plateat or peneplane which it traverses, while fronn the Metapedia down it is much more mature, with an open valley, sluggish flow, numerons islands and broad intervales. the whole but little above tide level. The Upsalquiteh and Neprisiqnit, with the intervening streams, such as Jacquet River and the Tattagouche, are also in the main young streams, with steep banks, rapid flow, few islands, and not a few falls or cataracts. some of which will be noticed later. In the case of the Miramichi, the upper portions of all its great branches are rapid streams, busily engaged in the work of excavation, and hence determining scenery of the widder type, the delight of the adventurous canoeman, as well as of the finny tribes which afford him additional attraction, while their lower
portions, as from Boiestown to the sea, have all the distinctive features of streams whose work is well nigh done.

Upon this eastern side of the Province we again have some good examples of "piracy." It has been already pointed out that the Restigouche is only the remnant of a stream whose upper half has been "captured" by the upper St. John. Similarly the Nepisiquit has probably captured the upper waters of the Cpsalquitch, these now constituting the South branch of the former stream. The waters of the upper Miramichi are believed to have formerly drained into the St. John, and possibly the same is true even of the upper Nepisiquit through a possible connection with the Tobique. Readers of the Review who may be interested in this subject will find it discussed at length, with illustrative maps, by Prof. W. F. Ganong, in the Bulletins of the Natural History Society of New brunswick, especially Vol. V., 1905.

If we now return to Nova Scotia, we find, as has been said, no streans of great size, the most important being the Avon, the Amnapolis, the Sissaboo, the Tasket, the Rockaway or Shelluurne, the Jordan, the Liverpool, the Port Medway, the La Haave, the Musquodoboit and St. Marys. They are also, as a rule, quite shallow, and much obstructed by rocky reefs or by morainic material, indicative of recent, i. c. post glacial origin. In these respects they do not differ greatly from streams of similar age and origin in New Brunswick, but two features remain to be noticed which, though not wanting in the latter Province, find here more remarkable illustration. The first of these is to be found in the enormous number of lakes, of every size and shape, which either lie at the heads of the tributary streams or interrupt their course. These lakes are in almost every instance very shallow, drift-dammed lakes, of which the rivers are the over-spinl, and in some instances, where the outlet has been cut through, they have become greatly dwarfed or even converted into natural meadows. Rossignol, liairy Lake (noterl for the remarkable pre-historic pictographs which at a few points adorn the rocky ledges upon its sides) the lakes comnected with the la Have, Liverpool, and Roseway rivers, and the Tusket lakes in Yarmouth comety, are among the largest and most interesting.

The second direction in which the Nova Sentian streams are noteworthy is in that of affording the finest illustrations of droaened or submerged rivers. This is to some extent true of all the streams draining into the Bay of Fundy; such as the Truro, A von,

Anuapolis, Bear River and Sissaboo, the lower portions of which are, like the Petitcoliac in New Brunswick, subject daily to conflict with the tides, which first oppose and finally temporarily overcome and drown the out-pouring waters. But the best illustrations are those of the southern coast, where the submergence of old river channels has become permanent. Reference has been made in an earlfer chapter to the remarkable indentations of the southern sea board, giving it much of the fretted character of the coasts of Norway. It may, however, now be added that these numerous indentations, of which Shelburne Harbor and Port Hebert, Mahone Bay, and Chester Basin, Halifax and Musquodoboit Harbors are good illustrations, are in reality the drowned extremities of the several rivers, now often quite small, which enter their heads. In the case of the La Haave, not less than fifteen miles of the river, or all that portion south of Bridgewater, is now only an arm of the sea. But most wonderful of all, these submerged chamels may often be traced by lines of soundings far beyond the present limits of the coast, showing that their former length and volume were much greater than at present and that they are indeed "drozened rizers." To cap the climax it may be added that there is good reason to believe that the great St. Lawrence itself was formerly an Acadian as well as a Canadian river, and that llowing across the now submerged basin of the Gulf of St. Lawrence, where its underwater channel is clearly marked, and where all the rivers of eastern New Brunswick were tributary to its flow, it passed out on one or both sides of Cape lireton to the Atlantic, where the old channel is now recognizable more than 200 miles to the east of the present mainland! Such facts go to show that Acallia has had a history far back not only of its European, but also of its Indian occupancy, a history of which some other features may be considered in a later chapter.
"She is working in a poor building, and with ordinary children of all ages, on a three-hundred and fifty dollars' salary. She has almost mothing to work with in the shape of helps, but such fertility of resources as she showed, and such clear teaching! How she wove the ontside world into that teaching! Why, those children sreat right before your eyes. She moved about among then quietly, neatly dressed, talking in just the tone she would anse in ordinary conversation. She showerl stech a confidence in them that I never saw her look anxionsly at one of them. And the way those boys lowked at her!" -E.r.

## Play. <br> Mrs. Catherine M. Condon.

Play may be simply the spontaneous and outward expression by movement of the limbs, etc., of an instinctive feeling of comfort and well-being in the child. Later on, the desire to reproduce something which has been seen or heard strikes the fancy in such a manner that the child is impelled to reproduce it, with more or less crudity, in a concrete representation.

A more advanced stage of development, while it still deals in outward representation in tangible form, calls into intelligent action, forethought, memory, calculation, judgment, thereby arousing the very highest physical, intellectual and moral powers of the individual.

The educative value of play is unquestionable. The mere instinctive movements of the infant, not only improve in force, but also gain in directness and precision, and they also indicate the awakening of the intellect, and supply hints for its further development.

The next stage in which imitation and imagination, each helpful to the other, play so conspicuous a part, is so developing that in no other equal portion of human life does man learn so much of his own power, and his relations to the world around him, as in the first scven years of life, although they are almost wholly given over to play.

The social games of the boy and young man dfford a field for the exercise and development of physical vigor, mental alertness, and fine, sound moral fibre, indispensable factors in human success, and that just in proportion as they are carried on with moderation, and in strict accordance with law and order, and received rules of the game.

These statements being true, it is certainly of good omen that the importance of play is more and more recognized in the philanthropic world, and among educationists.

The redeeming, elevating influence of play has been, and is, well illustrated in the recreation schools for girls, established by the Countess of Jersey in the east end of London. They are play schools, pure and simple, and have amply justified their existence among a class who would have never entered their doors if catechism and books had been the bait offered. To those who liave only seen the happy well-conditioned child, who, with a little kindly notice now and then, witl play the live-long day so vigorously that he will often fall asleep in
the midst of it, the statement may seem strange that anyone should need to be taught to play. But life is so dull and hopéless, for many of these unfortunate London waifs and strayed, and they are so stupid and devoid of the upspringing self-activity of the ordinary child, that they either do not play at all, simply lounging, or, their plays are so vile and degrading in their parody of the wretched life around them, that they are simply a preparation for a criminal career. After a time, some of the fine lady slummers who had come to sneer at Lady Jersey's "fad," remained to help to teach the children to dance and sing, play innocent and amusing games, to tell fairy tales, and listen kindly to naive and admiring comments on their grace and beauty. One charming girl who was known as the "lady with the fevers" (feathers) in her picture hat, received almost the adoration of a goddess, and was a great lure to quiet good manners.

The light gymnastics, marching, circle games and dancing, soon corrected the slouching pose, and turned the shuffling walk into upright carriage and firm, measured tread; while the kindly treatment and absence of fear of ill-usage just as soon changed the down-cast eyes and shifty furtive glances into a straightforward look when addressed; often, too, into one of gratitude and affection.

Well-told stories developed the power of voluntary attention, and clean wit and wholesome humor, provoking happy laughter, soon taught the girls that they could be merry and gay withont obscenity, profanity and vulgar license. Then, too, a long happy day at Ostermoor Park, Lady Jersey's estate near London, opens up a delightful view of life, such as they had never dreamed of, and must set in a stronger light the fact that the kindness they have been receiving all along, las been given from the purest motives of sympathy with them, in their cheerless dife, and an earnest desire to raise them out of it.

This creates a sense of personal dignity and an honest pride to live up to this new and better atmosphere. When play has thus produced its humanizing effects, there are plenty of places open to them, where formal instruction is waiting to give them another uplift in the road to knowledge and efficiency.

If well-arranged play under conditions skilfully arranged will accomplish so much for these children so unfavorably placed, what a powerful and happy means of education it should prove in the development of children born and reared nunder lappier auspices.

## Katharine Carl.

Miss A. MacLean.

Katharine Carl stands in the, front ranks of the portrait painters of today,-an American, long a resident of Neiully, France, and an extensive traveller. She has painted many superior portraits in Europe and America, but her painting of the portrait of the Dowager Empress of China, being a unique distinction and illustrating her skill, will be her only work that I shall refer to now.

The Dowager Empress notified Mrs. Conger, wife of the American Ambassador, that she wished a portrait of herself, painted by an American woman, which portrait she intended should constitute her gift to the St. Louis Exhibition. Mrs. Conger notified Miss Carl and Miss Carl engaged to paint the portrait, and lived for nearly a year in the imperial-palaces of Pekin, seeing the Empress daily and associating constantly with the ladies of the court. She was present at all the religious and social functions aud received many tokens of the favor of the Empress. Miss Carl was the first white woman to penetrate the mysteries of the Chinese imperial household. Throughout all history no other person from the western world had been received into the intimacy of the Chinese imperial palaces. Since Miss Carl's reception one other woman, Miss Alice Roosevelt, has been entertained in a imperial palace in Pekin.

Miss Carl expected to meet in the Empress an old woman whose appearance would bear out the character for cruelty and tyranny which the world has believed since 1900 . Instead she met a charming little woman with a brilliant smile, very kindly looking and remarkably youthful, who extended her hand with a grace and cordiality which so won Miss Carl that she involuntarily raised the dainty royal fingers to her lips, though that was not in the programme.

Miss Carl was informed at the foreign office that the Empress would give her only two sittings, and when her first greeting was over she looked anxiously about to sec under what conditions she must paint. The hall was large but the light was false, and the only place where a proper light could be had was in front of a great plate glass door, and the space there was so small that the large canvas on which the Empress wished the portrait painted had to be placed very near the throne where she preferred to sit. With so large a portrait as she was to paint this was a great disadvantage. However, her majesty having dressed herself in the
garments she thought fit, and having seated herself, Miss Carl began to sketch. She had been informed that her majesty would not t:nderstand any preliminary sketches, she must begin at once on the portrait and risk getting no more sittings, so she began. To use her own words:-"For a few moments I heard the faintest ticking of the eightyfive clocks as if they were great cathedral bells clanging in my ears, and my charcoal on the canvas sounded like some mighty saw drawn back and forth. Then, happily, I became interested, and utterly unconscious of anything but my sitter and my work. I worked steadily on for what scemed a very short time, when her majesty turned to the interpreter and said that enough work had been done for that day. She said, she knew I must be tired from our long drive out from Pekin, as well as from my work, and that we must have some refreshments. She then descended from her throne and came over to look at the sketch. I had blocked in the whole figure and had drawn the head with some accuracy. So strong and impressive is her personality that I had been able to get ewough of her character into this rough whole to make it a sort of likeness. After Jooking critically at it for a few minutes, she expressed herself as well pleased and paid me some compliments on my talent as an artist. She then called Mrs. Conger and discussed the portrait for a few moments, then turning to me she said the portrait interested her greatly and that she should like to see it go on. Slie asked me, looking straight into my eyes the while, if I would care to remain at the palace for a while that she might give me sittings at her leisure."

At first Miss Carl feared that the strangeness of her position and the sense of loneliness that at times crept over her, born of a feeling that she had somehow been transported into a strange world, would affect her work, bat the cordiality of the Empress, who set aside a pavilion for her use, and told her not to hesitate to ask for anything she wished, and to make herself perfectly at home, soon placed her at case and free from disyuicting feelings.
"At the second sitting," said Miss Carl, "before the Empress was guite ready for ne to begin, and before she had transfixed me with her piercing glance, I scamed her person and face with all the penetration I could bring to bear, and this is what I saw:
" 1 perfectly proportionated figure, with head well set upon her shoulders and a fine presence; really beautiful hands, daintly small and highbred in shape; a symmetrical, well formed head, with a
good development above the rather large ears；fine broad brow，delicate well arched eyebrows，brilliant black eyes set perfectly straight in the head；a high nose，of the type the Chinese call noble，broad be－， tween the eyes and on a line between the forehead； an upper lip of great firmness，a rather large mouth， but beautifn1，with mobile red lips，which，when parted over firm white teeth，gave her smile a rare charm；a strong chin，but not of exaggerated firm－ ness，and with no marks of obstinacy．Had I not known she was nearing her sixty－ninth year I should have thought her a well－preserved woman of forty．
＂After little more than one hour＇s work her majesty decided that enough had been done for the morning and that we both needed rest．She came over and looked at the sketch and it was easy to see that she liked it much better now that the color was being put on．She stood behind me discussing it for sometime and said she wished it were pos－ sible for someone else to pose for the face so that she might sit and watch it grow．She thought it very wonderful that on a flat canvas the relief of the face could be represented．＂

And so the sittings went on，the attendants and cuntelis came and went，the Empress took tea，con－ versed，smoked the graceful water pipe or European cigarettes which she never allowed to tonch her lips but used in a long cigarette holder．She seemed to understand that she must not move her head very much，and would look apologetically whenever she moved it，but the artist preferred to have her move a little instead of sitting like a statue．And so at last in that strange old world palace there stood completed the picture of one of the most distin－ guished monarchs of today，and Katharine Carl＇s unique experience and pleasing task were ended．
Autumn Fires．
1 th the other gatdens．
Ani all up the vale，
birom the atttamn bon－fires
Sec the smoke trail！
Pleatsint summer over，
And all the stmmer flowers，
The red fire blayes，
The grey smoke towers．
Sing a mong of scatarols，
Sonctling bright in all！
Flowern ith the sumamer．
lïres ill the fall！
—Kいわい！Lowis S゙だ，nson．

## The Tides．

From the vast ever－plentiful sea lmpelled by the heavenly host， l＇resl，ever－flowing，resistless in power， Summer and winter，true to the hour， Come the tides with their gifts for the coast．

When the dark＇s at the flush of the dawn， And the tide mirrors day＇s rosy birth， Dimpling and sparkling it dances along， Laving the shores like a heavenly song， That cheers the sad hearts of the carth．

When the sun in the pride of his strength Pours his quivering glories abroad， Drying the grasses，stiff＇ning the reeds To the fens，like a generous supply for ali needs， In swings the tide，fresh from God．
Softly，like peace to a penitent soul， When evening bends low o＇er the sea， And the clouds kiss the ripples good night， In steals the tide over quicksand and shoal When God blots a sin from his sight．

When the stately star－companies sail The violet hollow of space－
Distant，like saints lost to mortals below－
Then through the dark earth－ways the tide currents flow Full of stars－the fresh tokens of grace．

When the gale howls a dirge in the dark，
And the thondering surf shakes the land，
In foams the tide like a bosom of wrath，
Wreckage and terrible death in its path，
And yet－it is held in His hand．
At the dawn，at the noon，at the dusk，
In the calm，in the storm，what avail
Tears for the night or fears for the day？
Deep though the guit－stains and devious the way The flood tides of God cannot fail．

> -Henry Twrner Bailey, in the Congregationalist.

There are several good reasons why DeMille should be better known．He was，in his time，the widest read and most productive of Canadian writers．He is still in many respects the most re－ markable．As a teacher，he was due of the most capable and best loved men that ever sat in a pro－ fessor＇s ehair．After the lapse of a quarter of a century his old students write and talk of him with deep affection and respect－an honour accorded to few．－From＂DeMille，the Man and the zeritcr，＂ by Archibald MacMcachan in Septenber Canadian Magazine．

A teacher，lately married．writes：＂I took the Revisw during my whole teaching career，and it was a great help to me． 1 wish for the editor and its contributors many suceessful．prosperous years．＂ －E．L．M．

## September.

Now hath the summer reached her golden close, And lost, amid her cornfields, bright of soul,
Scarcely perceives from her divine repose How near, how swift, the inevitable goal; Still, still, she smiles, thongh from her careless feet, The bounty and the fruitful strength are gone, And though the soft, long, wondering days go on
The silem, sere decadenee, sad and sweet.
In far-off susset cornfields, where the dry Gray shocks stand peaked and withering, half concealed In the -rougll earth, the orange pumpkins lic, Full-ribled; and in the windless pasture-field
The sleek red horses o'er the sun-warmed ground Stand pensively about in companies,
White all around them from the motionless trees
The long clean shadows sleep without a sound.
Under cool elm trees floats the distant stream, Moveless as air; and o'er the vast warm earth
The fathomless daylight seems to stand and dream, A liquid cool elixir-all its girth
Bound with faint haze, a frail transparency, Whose lucid purple barely veils and tills The utmost valleys and the thin last hills,
Nor mars one whit their perfect clarity.
Thus without grief the gollen days go by, So soft we scarcely notice how they wend, And like a smite half happy, or a sigh,

The summer passes to her quiet end;
Ant soon, too soon. around the cumbered eaves
Sly frosts shall take the creepers by surprise,
And through the wind-touched reddening woods shall rise
October with the rain of ruined leaves.

- Archibcld Lampman.


## A Thanksgiving keading.

## A Harifst in Somersetshme in the Sibwenteental Century.

Then the golden harvest came, waving on the broad biflside, and nestling in the quiet nooks scooped from out the frimge of wool. A wealth of harvest such as never gladdened all our countryside since my father ceased to reap, and his sickle hung to rust. ..... All the parish was assombled in our upper conrtyard: for we were to open the harvest that year, as lad been setted with loarmer Nicholes, and with Jasper Keble, who held the third or little farm. We started in jroper orter. thereiore, as our practice is: lirst, the prarson, Joshialn lonwlen. Wearing his gown and cassock. with the parish bible in his hand, and a sickle strapped behime him. As he strole along well and stontly. being a man of substance, all our family cance next. I leading mother with one hand. in the other bearing min father's look, and witla a loaf of our man breall and a keg of cifer tupon my back. lesside us (sisters) Amie and Lizzie walked, wearing wreaths
of corn-flowers, set out very prettily, such as mother wonld have worn if she had been a farmer's wife, instead of a farmer's widow. Being as she was, she had no adormment, except that her widow's hood was off, and her hair allowed to flow as if she had been a maiden; and very rich bright hair it was, in spite of all her troubles.

After us the maidens came, milk-maids and the rest of them. ..... There must have been three score of ns, take one with another: and the lane was full of people. When we were come to the big fieldgate, where the first sickle was to be, Parson Bowden heaved up the rail with the sleeve of his gown done green with it; and he said, that everybody might hear him, though his breath was short, "In the name of the Lord, Amen!"
"Amen! So be it!" cried the clerk who was far behind, being only a shommaker.

Then Parson Bowden read some verses from the parish lible, telling us to lift up our eyes, and look upon the fie!ds already white to harvest; and then he laid the bible down on the syuare head of the gate-post, and, despite his gown and cassock, three good swipes he cut of corn, and laid them right end onwards. All this time the rest were huddling ontside the gate and along the lane, not daring to interfere with parson, but whispering how well le diel it.

When he had stowed the corn like that, mother entered, leaning on me, and we both said, "thank the Lord for all his mereies, and these the first fruits of his hand!" And then the clerk gave out a psaln verse by verse, done very well : althongh he sneezed in the midst of it, from a beard of wheat thrust up his nose by the rival cobbler of Brendon. And when the psalm was sung, so strongly that the foxgloves on the bank were shaking, like a chime of befls, at it, parson took a stoop of cider, and we all fell to at reaping.

Whish, the wheat falls! whirl again: ye have had good dimmers ! give your master and mistress plenty to supply another year. And in trnth we did reap well and fairly through the whole of that afternoon, I not only kecping lead, hut keeping the men up to it. We got throngh a matter of ten acres ere the sun between the shocks broke his light on wheaten phomes, then lumg his red clock on the clouds, and fell into gray slumber.

Secing this, we wiped onr sickles and our breasts and forcheads, and sonn were on the homeward robld. lowking forward to sood supler, ..... to harvest-song and festivity.-R. D. Bhackmore in "Lorna hoon."

I have been much pleased with the supplementary att pietures and the deseription of the same. and have enjosed the articles by 1)r. Datiter.-R. 13. M. Port Elsin, $\therefore$. 1 .

The RI: HEW improves with every mumber. I wish it renewerl snecess.-(i. II.

## The Bunco-Bird.

They tell the Spectator that the last of the southbound birdlings has by this time taken wing-news at which he is unfeignedly glad. Now perhaps he may be able to turn off a little work. Since the last of August, when they began to pack their grips and consult time-tables, they have kept him in a state of perpetual unrest. Two fine old apple-trees beside his window have been full all day of restless little bunches of feathers, stopping over to break the journey from the far North. Every time he has taken up his pen some unfamiliar "tsip" or "cheep" from without has made him drop it and seize a spyglass and a bird book. From this it will be seen that the Spectator has fallen prey to the devastating epidemic of ornithitis.

It was not always thus. The Spectator well remembers when all birds looked alike to him; when you could cheat him with the alarm-note of a robin; when the song-sparrow passed with him for a dozen kinds of bird. In those good old days he could write in the midst of a musical festival. Nothing in feathers had power to train him from his work, charm it never so wisely. But last summer, in New Brunswick-a place much favored for summer residence by the more fastidious sort of bird-he fell into the clutches of a confirmed ornithomaniac, who never let him go untild she had made him as mad as herself.

She did not accomplish it all at once. It was weeks before the Spectator could be got to forget his dinner, whereas the lady his instructor ignored hers altogether when there were strange birds about. She would sit petrified under a tree for hours together, she would stand rooted in a bog, she would prowl through leagues of tank and tangled underbrush, she would plant herself in the path of an oncoming train-and all for the sake of scraping acquaintance with some sly songster as big as your two thumbs. Mosquitoes, cows, home, husband, country-all these were as nothing to her when once her eye had caught the flirt of unfamiliar feathers, or her ear the lilt of a new song. At such times it was as idle to talk to her as to try to gossip with the Sphinx. It is the Spectator's fixed conviction that had a ruffian menaced her with a gun while she was in the trance of bircl-stalking. she would merely have raised that delicate hand of hers in an admonitory " $\mathrm{S}-\mathrm{s}-\mathrm{s} \mathrm{s}_{1}$ !"

Now, the Spectator tork his birds more philoso-phically-that is. at first-eneonraged thereto by the ornithomaniac herself. That art ful woman ded him to believe that the life of a lirdist was one of
appreciative otiosity. She installed him in a hammock in the sun-flecked shade of a clump of silver birches and coaxed him into watching the birds that skipped about among the branches over his head. She taught him the simplest of the songs which rang out continually from a little grove not a hundred yards away. And the Spectator liked it. He liked to watch a fiery redstart fidgeting through the leafage, dropping from twig to twig in his pitiless pursuit of fat worms. It. pleased him to think how much easier dinner came to him than to this gorgeous black-and-orange "candelita." He had no objection to listening to the white-throated sparrow calling eternally, "Poor-Tom-Peabody, Peabody, Peabody!" or the red-eyed vireo repetitiously preaching, or the hermit thrush whistling clearly from the dusk of the grove. It was sociable and didn't interfere with cat-naps of the most satisfactory variety. But his instructor did not long indulge him in this sort of luxurious idfing. When the Spectator had listened to bird songs until he could not hear a twitter without a spasm of curiosity, she tightened her toils. Bringing a low chair, she came to keep the Spectator company in his bird vigils under the birches, and boasted shamelessly of her own sharpness of eye, prating of "crowns" and "rumps" and "median stripes" and "wing coverts" and other things the Spectator had not known appertained to birds, until he grew jealous for his own powers of observation. In selfdefense he began to strain his eyes to recognize the redstart's silent, olive-tinted little dud of a wife. He vexed lis soul to make out the distinguishing marks of Madame Tom Peabody and Mrs. Preacher-bird. Before he knew it he was the hopeless slave of the spy-glass.

Then, indeed, was his subjugation complete. The ornithomaniac at once began her serious educational campaign. Kouting the Spectator out of his comfortable hammock, she led him afield in the broiling sun. It was then that the Spectator met his arch-enemy, the junco-bird. "The junco is so easy," said his teacher, "and I can show you the nest. They're a trifle slyy now, but when the young birds are out of the nest they'll hop about our very doorstep." So she led the way to a meadow, deep in daisies, which served her in lien of a front lawn, and bore down cautiously upon a colony of little white spruces. When she was within six feet of the trees, there came a sudden whir of wings, and the Spectator caught a flash of white lightning. "There goes the mother bird!" cried the bird-fancier in a satisfied tone. "You got a splendid view of her. You'll know her again by the white tail-feathers!"

Then she made the Spectator kowtow while she lifted the lowest branch of the spruce and gave him a dim glimpse of five whitish ovals in a grassy nest underneath. Then, having made him acquainted with the alpha and omega of the junco, she took him for a walk.

They had not gone far when the Spectator spied a bird all by himself, a blackish bird with a pink bill. He referred it to the lady. "Why, that," she cried, "is a junco! Didn't you see the white tailfeathers?" "No," said the Spectator, a trifle abashed. "I think he was sitting on his tail. But I'll know him the next time." And they went on. The ornithomaniac kept stopping in the lovely woodland road to listen for invisible birdlings, and the Spectator found himself far aliead. He stood waiting, drinking in the fresh beauty of the wood-for New Brunswick in late June is like New England in May -when a queer kind of trilling began in a tree close at hand. Some bird-Demosthenes, it seemedwas trying to sing with his mouth full of pebbles. The Spectator stoorl like a statute and raked with his eyes every tree in sight. And he was rewarded. Not only did his eye light on the singer, but the bird considerately sat still until he had time to mark its every detail of dress. When the bird flew, he dashed back to the authority in the road behind him. "I've found a bird," cried he, thereby putting to route a black-throated green warbler the bird-lady was studying; "I've found a bird, and I looked at her very carefully. She had a white front and a decp black yoke." The lady interrupted with a faraway look in her eyes. "It was a junco," she said. The Spectator used the most powerful language he allows himself. "Behold!" cried be, "all juncos are impostors, and all birds are juncos! No more will I call him junco-the name of that bird is the Bunco-bird from this time forth, and even for ever more!"

To comfort him the bird-fancier took him strawberrying on the top of a tall hill. But even here there was a little clump of conifers, and she thought she heard a chickadee discoursing among the highest branches. The question was, Is the bird a Hudsonian chickadee, or just a chickadee? and the fate of the nations appeared to depend upon the answer. The Spectator was set down on a pile of prickly twigs, with instructions not to move an eye-winker. He stood it awhile. But when his nose tickled and he wasn't allowed to scratch it, he rebelled and made a break for the open. Here he found strawberries, plump and luscions, half huried in little green mounds of moss. He made him a cornucopia out of a newspaper, and had
picked a generous cupful of berries when he was startled by a guttural hiss from the ground beside him. He looked down, and there at his very heels was an awesome fowl of some sort, all mouth and rumpled mottled grayish feathers, hissing at him as viciously as an angered snake. The Spectator was surprised. He got up so hastily that he spitled his berries and took a step or two in flight. Then it ocenrred to him that he might, like Falstaff, overestimate the strength of the foe, and he turned back to investigate. The bird, he then saw, was making the very most of itself, ruffling its feathers and drooping its wings like a belligerent sparrow. He guessed that a tape-line would show it to be not much longer than a robin, though with a much greater spread of wing. He thought he could cope with a thing like that, and determined to subject it to careful observation.
"Is it," he asked himself serionsly, "by any chance a Bunco-bird?" He considered its mottled plumage and answered firmly, "No!" The bird by this time was trying to make off, hobbling and fluttering as if it had a broken wing. In the interest of science the Spectator followed. The mulucky bird stumbled and blundered painfully over the hillocky ground, but managed to keep just out of reach of the Spectator's wishful fingers. In this way it worked its way a dozen yards or so, when, without the slightest warning, it sailed leagues high into the air. And, bo! it was ummistakably a nighthawk! And no more an injured night-hawk than the Spectator was a gratified man. Then from a dizzy: height it swooped down and just skimmed the top of the Spectator's head. A second later it was joined by two others of its noxions kind, and the three began to ammse themselves by secing how near they could fly to the Spectator without putting out his eycs. The Spectator put his manhood in his pocket and fled for the protecting shade of the wood. Here he found his preceptor and retailed his woes. "''shaw!" she cried, in obvions vexation. "Yon missed the chance of your life. You must have been within a few feet of the young. That old hen fluttered off to decoy you away. You've been egregiously taken in." So it was a Bunen-bird after al! !-"Spectator," in N. Y. Outlook.
I. Model and draw a horse's hoof. 2. Model and draw a cow's hoof. 3. Model and draw a cow's horn. 4. Model, draw, sew varions kinds of fishes. 5. P'ress, draw, sew ferns. 6. P'aint, model, sew a frog. 7. Draw fishing hook. 8. Draw, moktel, sew straw hat. 9. Model. draw, sew turtle. 1o. Draw bees. I1. Draw and sew bechive and bees. 12. Model and draw cocoons. 13. Moxlel, draw, and sew butterflies. I4. Draw and paint may fowers.

## A Contented Teacher.

Every college professor in writing his confessions seems to be giving an Apologia pro zita sua. His loudest complaint is about the salary. Small as mine is I sometimes think it is as large as it would be if I had gone into some other occupation; but, as I said before, I am so commonplace that my example has no bearing whatever on the argument for higher salaries for college men. In one of the most recent publications giving the woes of the professor there is a lamentation to the effect that his house is piainly furnished without even the luxury of an oriental rug, and that one of the pleasures of his family life is the arnual ride out into the country. This is pathetic, especially as for many years his regular salary has been $\$ 2000$ a year. Nor does he live in a large city. I must have a genius of a home-maker, for with a salary that averages less than his we can go driving into the country many times a year and we have the luxury of walking over several antique oriental rugs. For ten years I have been carrying ten thousand dollars of endowment insurance, which will mature when I am about fifty years old. And during each summer we can spend part of the vacation on a farm, paying our board, too, and some years we go even to the seashore. Without going into detail, I may be believed, I hope, in saying that our social life is not one of parsimonions barrenness. -From the September Atlantic.

## Opening Exercises.

Every teacher. I suppose, has some trouble in finding material for the opening exercises and in making such exercises interesting to all.

In my school the songs we a!l knew grew tiresome, stories lost their charm, and quotations dragged, so I decided to put the opening exercises into the pupils' hands and see if they could awaken new interest.

Nearly all of my older pupils knew songs, recitations, or dialogues which were new to the rest of the school, and the p!an worked clamingly.

Helen recites untisually well, and I had bit to announce that Helen would open school with a recitation on a certain morning to insure prompt attendance and the best of attention on that morning. It was the same in the case of Elia, who sings prettil!: Fven a lithle first srader sang such a pretty song that every child showed his pleasure and apprectation; but the dialogue given by two hoys (which diey land learmend for an ounsile (matertaiment). was a sumprise and delighn even to myself.

I get three good results from this plan. It is a relief to the teacher, it helps in prompt attendance; and it is good practice for the performers them-selves.-Popular Educator.

## Origin of a Famous Hymn.

A pathetic and yet charming story is told of the origin of the well-known hymm, "Blest Be the Tie That Binds," which was written by Rev. John Fawcett, an English Baptist, who died in 1817, having spent nearly sixty years in the ministry. It was in 1772, after a few yéars spent in pastoral work, that he was called to London to succeed the Rev. Dr. Gill. His farewell sermon had been preached near Moinsgate, in Yorkshire. Six or seven wagons stood loaded with his furniture and books, and all was ready for departure.

But his loving people were heart-broken. Men, women and children gathered and clung about him and his family with sad and tearful faces. Finally, overwhelmed with the sorrow of those they were leaving, Dr. Fawcett and his wife sat down on one of the packing cases and gave way to grief.
"Oh, John," cried Mrs. Fawcett at last, "I cannot bear this! I know not how to go."
"Nor I either," returned her husband, "and we will not go. The wagons shall be unloaded and cverything put in its old place."

His people were filled with intense joy and gratitude at this determination. Dr. Fawcett at once sent a letter to London explaining the case and then resolutety returned to his work on a salary of less than $\$ 200$ a year. This hymn was written by Dr. Fawcett to conmemorate the event.

## The Fruit Tree.

The Tree's early leaf-buds were bursting their brown;
"Shall I take them away?" said the Frost, stealing down. "No, leave them alone,

T"ll the blossoms have grown,"
Prayed the Tree, while he trembled from rootlet to crown.
The + ree bore his blossoms, and all the birds sung:
"Shall I take them away?" said the Wind as he swung. No, leave them alone,
Till the berries have grown."
Said the Tree. while his leatlets all quivering hung.
The Tree bore his fruit in the midsummer glow,
Said the little girl, "I may pluck your bright berries, I know?"
" Yes; growing is done: Therefore for yon every onc."
Saiel the "Tree, while be fent down his laden brughe low.
-Bjornsterne Bjornson.

For the Very Little Ones.

## Dolly's Lesson.

Come here, you nigoramus?
I'm 'shamed to have to 'fess
You don't know any letter, ${ }^{\circ}$ Cept just your cookie $S$.

Now, listen, and l'll tell you-
This round hole's name is O ,
And when you-put a tail in, It makes a $Q$, you know.

And if it has a front door To walk in at it's C ,
Then make a seat right here To sit on, and it's. G.
And this tall letter, dolly, Is 1 , and stands for me,
And when it puts a hat on, It makes a cup o' T.

And curly I is J, dear, And half of $B$ is $P$,
And E, without his slippers on, Is only F , you see!
You turn A upside downwards, And people call it V;
And if, it's 'Twins, like this one, W 'twill be.

Now, dolly, when jou learn 'em, You'tl know a great big heap-
Most much as I-O doliy! I believe you've gone asleen!
-The Youllis Companion.

## Suppose.

Suppose, my little lady,
Your doll should break her head,
Could you make it whole by crying,
Till your eyes and nose are red?
And wouldn't it be pleasanter
To treat it as a joke.
And say you're glael, "'Twas Dolly's
Ancl not your head that broke?"
Suppose you dressed for walking,
And the rain comes fouring down,
Will it clear off any sooner
Because you scold and frown?
And wouldn't it be nicer
For you to smile than pont,
And to make sunshine in the house
When there is none withont?
Suppose your task, my little man,
Is very hard to get,
Will it make it any easicr
For you to sit and fret?
And wouldn't it be wiser,
Than waiting like a dunce,
To go in work in earnest,
And learn the thing at once?

Hickory, Dickory; Dock.
Hickory, Dickory, Dock,
'Tis nearly ninc o'clock, And ringing clear, The bell we hear,
Hickory, Dickory, Dock.
Hickory, Dickory, Dock,
'Tis strking nine oclock; Obey the rule, Haste into school,
Hickory, Dickory, Dock.
Hickory, Dickory, Dock,
'Tis just past nine o'clock;
Our prayers àre done,
Work is begun,
llickory, Dickory, Dock.
-Teachers' Magazine.

## The Water Drops

Some liftle drops of water.
Whose home was in the sea,
To go unon a jonrncy
Once happened to agrec.
A clond they had for carriage,
They drove a playful breeze,
And over town and country
They rode atong at casc.
Put. oh. they were so many,
At last the carriage broke,
And to the ground came tumbling
These frightened little folk.
And through the moss and grasses
They were compelled to roam,
['nti] a lrooklet found them,
And carried them all home.
-Philadelphia Teacher.

## What the Wind Prings.

"Which is the wind that brings the cold?"
" The North-wind. Freddy-and all the snow;
And the sherp will scamper into the fold,
When the North begins to blow."
"Which is the wind that brings the heat?"
"The South-wind. Katy: and corn will grow. And peaches redken, for you to eat.
When the Sonth wind begins in blow."
"Which is the wind that lorings therain?"
"「he East-wind. Arty: and farmers know
That cows come shivering un the lane.
When the Cast wind begins to blow."
"Which is the wind that brings the flowers?"
"The West-wind, Bessy; and soft and low The birdies siner ith the summer bours.

## N. S. Educational Association.

On Tuesday morning, September 25, the large assembly hall of the Halifax County Academy was packed with teachers, when Dr. Mackay, Superintendent of Education for Nova Scotia, arose to give his address on Our Present High School Problem. In his opening remarks, Dr. Mackay referred to the generosity of the provincial government in providing annuities for teachers, and also referred to another parliamentary measure by which an advisory board to confer with the superintendent on clucat:onal matters was to be appointed; and annonnced that two of the members of the board were to be chosen by the teachers from among themselves beforc the close of the present convention.

He then gave a short history of our present course of study for high schools and academies, and spoke of the radical clanges that the committee appointed last year to consider the rclation between the high schools and the colleges would make in it, as outlined in their preliminary report published some months ago. He thought their suggestion to lengthen the course one year, and require all candidates for first-class license to complete it, if acted upon, might work injury to the schools by deterring capable young persons from entering or pressing forward in the profession. Many of our teachers, especially those of limited means, had to make great sacrifices to complete three years of high school work, and then attend the Normal School a year in order that they might obtain a first-class license. If they had been compelled to spend still another year in high school, they simply would not have done it; they either would not have entered the profession, or would have been content with a lower grade of license.

The demand for teachers is greater than the supply with the course of study as it is. A large number of permissive licenses hat to be issued this year to persons who had not been able to fulfil the present refuirements, and still there are schools without teachers, because none could be got. If the conditions on which liecuses are issued are made more stringent, in all probability there will be a still greater scarcity of teachers.

The suggestion that persons applying for a firstclass license be compelled to pass an examination on Latin, would, if carried out, have a like tendency to reduce the number of teachers. In his opinion, too, a knowledge of Latin was not the best equipment that a teacher could have. A person who had given the same time to the study of English or the natural sciences was, nther things being equal. better prepared to teach his pupils to make the best use of their ooportunities than the one who had given his hours to Casar. That this was the opinion of the most advanced school anthoritics of the day he tricd to prove by an examination of the course of study in secomdary selrols in Prussia. England. ('niterl' States and Ontario.

For several weeks previous to the meeting of the Association a heated discussion had been carried on in the Halifax papers between Prof. Howard Murray, secretary of the committee appointed to consider the relation between the high schools and the colleges, and Supervisor McKay, as to the wisdom of compelling candidates for first-class licenses to pass an examination in Latin. So much feeling was aroused among those interested in the matter that this became the dominant question of the convention. All were on the tip-toe of expectation as the time drew near to vote on the adoption of the report, as it was uncertain whether there was a majority in favor of it or not. Pefore the vote was taken, however, the motion to adopt the report was withdrawn, and in its stead what was called a "compromise" course, in which Latin was made an optional subject for candidates for ist, and and 3rd class licenses, was put forward. This passed with but little opposition, and a committee of sixteen was appointed to prepare a detailed programme for all the grades of both the common and high schools.

The public mecting. Wednesday evening, was held in the spacious hall of the School for the Blind, and as no time was given to business. it was probably more enjoyed than any meeting of the convention. Lieutenant-Governor Fraser, in an eloquent speech, urged that the three I's-Industry, Intelligence and Integrity-be given a prominent place alongside of the three R's. Dr. McCarthy, Archbishop of the Roman Catholic Church, expressed his belief that the day would come when all civilized people would agree as to what should be the scope of ellucation, and likewise of religion. Education would doubtless take into consideration the child's physical, mental and moral natures. Without health, man is miserable; without intellect, he is helpless; without morals, he is dangerous.

Professor Magill. Justice Longley, Senator Poirier and Inspector Cowley, of Ontario, also addressed the meeting.

Other addresses were given by Professor F. H. Sykes, of Columbia University, N. Y.: Professor Sexton, of Dalhousie University, and by Professor MacKenzie. Dr. Woodbary and Dr. Johnson spoke of the needs of dental inspection of the pupils in our schools. Time did not permit hearing the paper of Professor Woodman on physical geography and of Miss A. Maclean on art, but these will be published in the proceedings.

A reso.ution was passed requesting the government to make the agreement between teachers and trustees binding for more than one term, or until three months after notice was given by either party to the other that a change was desired.

Principals B. MacKettrick. of Lunenburg, and E. I. Lay, of Amherst, were elected members of the advisory board.

I have found the Review a great help in the past seven years.-G. K. M.

## A Little Girl's Bright Story.

A girl seven years old has originated the following guessing story:
"Can you guess what I am?
I have two eyes.
Yet I am not a boy.
I am round, and ami not a ball.
Some of my brothers have three and some have four eyes, and yet we have no heads.

We are carried, for we have no legs.
I am missed when lost.
Can you guess what I am?" (A button.)

-C. W. Rindus.

## CURRENT EVENTS.

At the instance of the imperial government, an international commission has been called to meet in London during this month, to consider the subject of electrical units, with a view to securing uniformity.

The little Norwegian ship Gjoa has reached Bering Strait thus completing the northwestern passage. The Gjoa left Norway in 1903; and, having passed through channels where a large vessel could not follow, went into winter quarters last year at the mouth of Mackenzie River. She has now reached the Pacific, and is the first ship that has made the passage. Her commander, Captain Amundsen, believes that he has discovered the true magnetic pole.

Five thousand persons perished in a recent typhoon at Hong Kong, and an entire fleet of six hundred fishing vessels destroyed. The Chinese residents of San Francisco have sent ten thousand dollars for the relief of sufferers.
In view of the possible early construction of a line of railway to Fort Churchill, on Hudson Bay, the government has reserved land on both sides of the Churchill River, for ten miles from its mouth.

The Trent Valley canal it to be pushed through at once from Georgian Bay to Lake Ontario. It will probably be finished in 1908.

A British inventor has patented an uninflammable celluloid.

The Japanese residents in Hawaii complain of inl treatment by Americans, and have asked their home government for the protection of Japanese war vessels.

It is stated that sixty thousand elephants are annually slaughtered in Africa for the sake of the ivory.

The boundary line between Canada and the United States is 3,000 miles long- 1,600 miles land, 1,400 miles water.

British Columbia, Canarla's largest province, is equal to twenty-four Switzerlands.

A German inventor claims to have a wireless electric appliance by means of which steam will be antomatically shut off in two vessels approaching each other in a fog.

The railway commission at Ottawa has approved plans for tumelling Detroit river. Two parallel tracks will be laid at a depth of sixty-five feet below the bed of the river.

The largest passenger steamship in the world is the new Cunard steamship Mauretania recently launched on the Tyne. She is 790 feet long; and her complement of passengers and crew will be more' thran 3000.

The Canadian Pacific Railway has proved that the Canadian route for English mails to the Far East is seven days shorter than the Suez Canal ronte : and most of the mail matter from the United Kingdom to Hong Kong and Singapore will hereafter le sent via Canada.

The insurrection in Cuba has led to United States intervention. As yet it is peaceful intervention, and seems likely to bring about peace between the warring factions; luut Cuba is now more than ever to be regarded as a dependency of the United States. There is little doubt that the present uprising, like others, was planned and financed by interested persons in the United States.

A provisional govermment with Mr. Taft. United States Secretary of War, as governor, has assumed authority in Cuba. No disturbance of any kind occurred. The business interests are gratified at the change of govermment. A striking feature of the provisional govermment is the fact that the Cuban flag has not been lowered. This establishes a precedent in provisional governments and protectorates.

Every school in Manitoba, under a recent government regulation, must lly the Linion Jack on every school day in the year, or forfeit the government grant. l'erhaps there is no better way of nationalizing the children of foreigners, of whom there are so many in the west.
A new Fimish parliament takes the place of the old, in which the nobles, clergy, burghers and peasants sat in separate chambers. The new parliament will consist of one chamber only, and will hold its first session in February next. The Emperor, as Grand Duke of Finland, has been asked to open it in person. Its members are to be elected by universal suffrage. This means more than the manhool suffrage to which we are aceustomed; for all adults, both men and women, will have the right to vote, paupers and criminals, of conrse, excluded. The Fimish and Swedish languages may be nsed in debates; and probably will be more freely used than is the French language in our Dominion parlianent. for few of the people of linland speak Russian.
lisperatito, the proposed new worle langtage, is making wonderfnl progress. At a recent Esperanto congress in Switzerland miont be seen thonsands of

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ls so carefully graded that every lesson is a review of what precedes it and a preparation for what follows.
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people, from nearly every part of the world, conversing and debating in the new international tongue.

L'Etang is again coming into notice as a possible winter port. It was strongly recommended in an official report at the time of the Loyalist migration, as the best port for a stronghold on the north side of the Bay of Fundy ; and a town was laid out there as a place of settlement for disbanded soldiers. But there was no business for the port, because there was at that time no means of infand communication, and the settlement was soon abandoned. The great disadvantage of L'Etang, in the want of a navigable river, can now be overcome by railway communication; and it is said to be easier of access, both by railway and by sea, than any other port on the bay.

It is the Emperor and not the Empress of China who has issued an edict looking to the future estal)lishment of a constitutional form of government for the Chinese Empire.

The Sultan of Turkey is suffering from an incurable disease, and must soon die. With his death will come a critical period for the Turkish Empire, so far. at least, as respects its Ehropean possessions; for there is no acknowledged successor who can unite the factions that are now with difficulty kept from open conflict.

Fishguard, a port in the southwest of Wales, has been connected by railway with the great eities of England, and will immediately become an important port for Canadian trade. as it is mearer than Liverpool or Southampton. Mail steamers will probably make it their first port of call.

Farmers in New Brunswick and Nova Scotia will be surprised when they know that a Mr. Peter MeKimnon. Pipestone, Manitoba, threshed out mo,ooo bushels of wheat, an average yicld of 30 bushels to the acre,-me tract alone, ir 5 acres, went 38 bushels of the very best No. 1 hard wheat. We cannot grow wheat like this, but at the present prices for butter and cheese there is no reason why these proviness should mot raise ten times the
quantity of butter and cheese that we have been raising for, the tast five years.

The Dominion Manufacturers' Association meets at Winnipeg this week. Among the important questions discussed is that of technical cducation. We are informed that the Association intends to ask the Government to appoint a commission whose duty it will be to visit Europe to ascertain all the latest methods of technical training. The feeling is gradually growing throughont Canada that the Central Government should assist the different provinces in providing technical instruction both in agriculture and the trades, and thus equip the mechanics and the farmers of this country so they can compete with the skilled labor of the United States.

The investigation of the relations between the Union Trust Co., and the Order of Foresters, shows that several officials of the Foresters were acting with the United Trust Co. to borrow funds from the Foresters, and to use these funds in purchasing large tracts of land in the Northwest. Financial agreements like these between companies, which only take the great public into their confidence when they are forced to, are rapidly making the people look askance at all kinds of insurances companies, whether they are the Foresters or any other.
A late telegram shows a race war existing in Georgia where the militia had to be called to quell the disturbance. This is only one of the many deeds during the last ten years that have been a disgrace to the civilization of this country. Such conditions seem to be the result, of a low state of education.
The recent severe illness of the Hon. Jos. Chamberlain, will no doubt hinder further development of the policy known as Preferential Trade between England and her colonies. It is surprising, however, the great change that has taken place in, Pritain on this subject since 1902. The almost unanimous vote given in July at the lioards of Trade conference held in London, shows that the merchants and traders feel that Chamberlain has got hold of the right idea.

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## W. J. GAGE \& CO., Limited, <br> Publishers. <br> Toronto

When the Peaver Line of steamers cance to St. John, in 1895, few persons dreamed that this was the nuelets of the steamship line which would with-

- in twelve years be able to take mails from Liverpool to Hong Kong; via St. Jolm in the short space of thirty days. "This is a fact, however, and the C. P. R. steamers (the Empresses), begin this work in December. These immense steaners, nearly seventy feet beam, and 600 feet long, will leave Liverpool during the winter for the Port of St. John. Passengers for Hong Kong will be landed by this steamship line and C. P. R. to Vancotver, and thence by C. P. R. S. S. to Hong Kong in less than thirty days from the date they left Liverpool. This shows that Canada is not only growing in the west. bttt also growing in the east.


## SCHOOL AND COLLEGE.

That the people of Yarmonth take more than ordinary interest in their ligh school, is evidenced by the crowds of people who attended the exercises recently hedd in the Opera House, to witness the contests for reading and the presentation of prizes. Contests for reading always provoke a friendly cmulation among pupils and arre attractive to the people.

The teachers of York and Sumbury will mect at Fredcricton on Thursday and Friday, October ir and 12.

The ammal convention of the Protestant teachers of the

Province of Quebec will meet in Montreal, October if, 12 and 13 .

Mr. S. W. Taylor, B. A., and Mr. Roy Hicks, B. A., (Mt. Allison), both of Westmorland Comnty, have entered MeGill College, Montreal, to pursue a medical course.

Netherwood, the Rothesiy school for girls, opened in September. The pupils were entertained their first Saturday by the teachers. They were driven to Gondola Point, then erossed the ferry and walked through the beautiful wooded road to Clifton. After a corn roast on the beach, they were ferried back to the Point, and driven home. The school is now in full working order, with an attendance of day and house pupils of thirty-one. 'The spidit of the older girls in the sehool is one of loyalty and earnestness, and promises to make the year a very successful one.-The Globe.

After fifty years of active service in the cause of educafion, 1)r. Crocket, of Fredericton, has retired, bearing the title of "Principal Emeritus of the Irovincial Normal Scloonl." "This mark of distinction was conferred upon him loy the board of Education.

Can any of our schools beat this record? "Dorothy Bublmann is a pupil at the Samdgate National Sehool, londen, and for eleven years she has meither been absent nor late at her studies. She is fourteen years of age, and has made 4.500 attendances since she first went to the sclokel. The Countess of Chichester las presented her with a book in recognilion of her record. Tiwo boys in this school have simidar records."
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Rev. C. J. Boulden, M. A., late headmaster of St. Alban's school, Brockville, Ont., has been appointed president of King's College, Windsor, N. S. The appointment is regarded as an exceedingly strong one. Mr. Boulden graduated with mathematical honors at Cambridge, and will take the professorship of mathematics, in the teaching of which he has been excecdingly successful.

The New Brunswick Normal School opened September 5 th with a registration of nearly three hundred.

Mr. R. R. Gates, M. A., B. Sc., who formerly acted as Vice-principal of the Middleton Consolidated School, spent the summer in research work at the Marine Biological Laboratory, Wood's Hole, Massachusetts, on a scholarship from McGill University. He will spend this year at the University of Chicago, where he has been appointed to a fellowship in botany.

Professor Ernest R. Morse, teacher of mathematics in the Missouri State Tcchnical College, has been appointed to succecd Professor C. C. Jones in the chair of mathematics at Acadia University. Mr. Morse graduated from Acadia in 1887, then taught four years in Horton Academy. He went to Harvard and graduated with mathematical honors, taught a southern college for two years and took two courses in mathematics at Chicago University. He is a valuable acquisition to the staff of Acadia.
Dr. Cox, rrincipal of the Grammar School, Chatham, exhibited a peannt plant to his grammar school pupils which he raised in his garden this summer. He planted some nuts with the shells on and some unshelled as an experiment, and both produced plants, but those without the shells spronted more quickly and grew faster. All the plants produced blossoms, but no fruit appeared. The doctor was surprised, and on pulting up ap lant, to find the fruit had grown and buried itself in the ground, a fullgrown peannt being attached to the plant. But that is the way peanuts grow-in the ground, like potatoes. The doctor has several peanuts mearthed.-Chatham World.
Mr. W. J. S. Myles, A.B., late vice-principal of the St. John Higl1 School, has leen appointed the principal in flace of Dr. H. S. Pridges, whose duties as superintendent of city schools have been increased by the introduction of the compulsory school law in that city.

The Revifw extends its hearty congratulations to Mrs. Fedith L. Kinrearl, néc Mitclecll, formerly of Moncton, now 35 Knappen Strect, Wimipeg, and wishes her many years of itappiness in her new home in the West.

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## RECENT BOOKS.

Elementary Mathematics. By F. W. Merchant, Principal London, Ontario, Normal School. Cloth. Pages 25. Price, 65 cents.

This book is intended for upper classes in high schools, and the work aims to cover the course in elementary mathematics prescribed for those classes. The combination of the experimental with the mathematical treatment is decidedly successful. Through an error in engraving, the coils in fig. 190, page 236, are incorrectly numbered and placed. The error will be corrected in subsequent editions.
Successful Teaching. Clotl. Pages íg8. Price, \$i.00. Funk \& Wagnalls Company, New York.
This is a volume of fifteen prize essays by practical teachers on practical teaching, with an introduction by Supt. James M. Greenwood. The essays are on important subjects of school management and method, and are concise and full of excellent suggestions.
In the Guide to Practical Penmanship, the author, Mr. W. A. McIntyre, Principal of the Normal School, Winnipeg, has given tlat which will take the place of the copybook, while it does very much more. It sets before pupils correct ideals of form in figure, letter, word and page, gives full instruction and carefully graded exercises to develop proper movement, and indicates the order of lessons in detail. At every point the movement exercises are rclated to the form study. The directions to the pupils are clear and definite. Price, 20 cents. The Copp, Clark Company, Toronto.
A Manual of Common Butterflies and Moths; A Manual of Common American and European Insects; both reproduced in natural colours, with their common and scientific names. These are small pocket editions prepared under the supervision of a competent authority, and are undoubtedly accurate. We know of no better means to get children interested in the common insects. There are no descriptions: just the picture and the name. Price, 25 cents each. Funk \& Wagnalls Company, New York and London.

Messrs. Blackic \& Son, London, have published the following: An Introduction to Good Reading, price Is. 6d.; A Small Collection of Good Poems, with notes on how to use them; The Complete History Reader, No. 7, price 2s, which deals with the history of the British Empire; the

# New Maps <br> Write for Spectal Prices. <br> DOMINION OF CANADA, Showing New Provinces of Alberta end Saskatchewan. BRITISH EMPIRE, by Sir Howard Vincent. WORLD IN HEMISPHERES. Shows all New Changes. <br> Milton Kindergarten Material semmanam Bradley 

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New Century Geographical Reader, price is. 6d., also gives glimpses of Britain and the Empire.
Geo. Philip \& Son, Fleet Street, London, publish some suggestive little volumes on Geography: "Geographical Gleanings," price is. 6d., contains excellent hints on the teaching of geograplyy; "'Round the World," price $6 \mathrm{~d} .$, is a useful primary reader in elementary geography. Philip's model duplex mads on card-board, price id. each, contain maps and exercises conveniently arranged for classes.
Messrs. Blackie \& Son, London, have published in their "Story-book Readers," price 4d. each, the following tales and selections from well-known books: Manco, the Peruvian Chief (Kingston), Christian and Moslem, the Siege of Torquilstone, and The Tournament (Sir Walter Scott), Cornet Walter and The Young Captain (G. A. Henty), Prince Murough's Adventures (D. Deeny) ; The Water Babies (Charles Kingsley), price 6d., and The Last of the Mohicans (J. Fenimore Cooper), price $1 s$.

## RECENT MAGAZINES.

Some time ago Professor Leacock wrote an article on the decline of poetry, and now Susan E. Cameron, a Montreal educationist of standing, and well known in the Maritime Provinces, takes up the cudgels on behall of the poets in the Canadian Maguzinc for October. She belabours the professor rather severely.
The October Atlantic Monthly contains the Autobiography of a Southerner-the fourth number of this suggestive contribution on Southern life. Two Memories of Childhood, by Lafcadio Hearn, and My Shakespeare Progress, by Martha Baker Dunn, with many entertaining stories, poems and essays, complete an excellent number.
One of the Quarterly Retiew's pleasantly discursive articles on The Literature of Egotism opens The Living Age for September 22nd. The article reviews critically but sympathetically some of the recent autobiographies or quasi-autobiographic fiction and reflection.

The September Chautauquan comes to its friends in a striking new form, easy-to-read, easy-to-carry, and casy-to-file for permanent reference on the home-library shelves.
The strongest feature of the October Delineator, aside from the fashions, which are splendidly slown, is the opening of the Countess von Arnhim's new serial story,

Fraulein Schnidt and Mr. Anstruther. It is now publicly announced that the Countess von Arnhin is the author of "Elizabeth and her German Garden."

## Official Notice.

## Lord Meath Empire Day Challenge Cups and League of

 of the Empire Prizes.Essay Competition for Empire Day, 1907.
The following are the conditions and subjects:
(a) Lord Meath Empire Day Prize (secondary schools) -a silver challenge cup, value $£ 10$ ros., presented by the Right Hon. the Earl of Meath, K. P., to be held by the school, and a personal prize of $£_{5} 5$ s., given by the League of the Empire, is offered for competition, inter-all secondary schools of the Empire, for an Empire Day Essay not exceeding 2,000 words. Age limit, 14 to 18 years old.

Subject: "The Conditions of Successful Colonization." (b) Lord Meath Empire Day Prize (primary schools) --a silver challenge cup, value E 10 sos., presented by the Right Hon, the Earl of Mcath, K. P., and a personal prize of $f_{3} 3$ s., given by the League of the Empire, is offered for competition, inter-all elementary schools of the Empire for an Empire Day Essay not exceeding r,000 words. Age limit, under i4 years old.
Subject: "The History of British India.
All essays must first be judged in the schools, and afterwards by the authorities kindly co-operating with the league in the different countrics of the Empirc.

Only those essays sent in throngh the authorized channets will be eligible for the final judging arranged for by the Federal Council of the League in London.

The essays which are entered for the final judging in London must reach the central office by the ist of February next.

The names of the winning schools will each year be engraved upon the cups, which are replicas of the Warwick vase.

The cups and prizes will be dispatched in time to reach the winning schools before the 2 th May each year.

The essays must be sent to the Education Office, Fredericton, not later than December 25 th, s got.
J. R. INCH,

Chicf Supt. Education.
Education Office, Sept. 9th, 1906.

## Isaac Pitman's

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# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

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## New AdCERTISEMENTS.

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[^21]St. John, N. B.
Aside from the scientific value of Dr. Bailey's article on Waterfalls in this number, the easy and simple style of the writer and the graceful diction which he has ever at his commancl, will make it a delight to readers.

Hon. 1. J. Twemme, Bremier of New Branswick. stated at the N. B. Provincial Teachers' Institnte at Chatham in June last, that he hoped before be retired from office, to increase the salaries of teachers and establish a fund for the superammation of teachers who have served the public faithfull:. Mr. Tweedie now sees the prospect of accomplishing this at an early day in view of the increase of the subsidy from the Dominion, which amoments to alont $\$ 130,000$.

A berutiful. little missive came to the Review office the other day enclosing an advance subscription, and with a kindly expressed wish for the prosperity of the Review for the coming year. Not that we do not receive many such letters, but this attracted by its simplicity and neatness. Written on delicately tinted note paper (not scented), the front page was surmounted by a single initial in gold, of choice design-that of the lady's surname, and the handwriting was easy and not too formal. The material cost of profucing such a letter is not great, but it makes a pleasant impression on the mind of the receiver.

## The Contact with Nature.

"It is grod for a man perplexed and lost among many thoughts to come into closer intercourse with Natire, and to learn her ways and catel her spirit. It is no fancy to believe that if the children of this generation are taught a great deal more than we used to be taught of Nature, they will be provided with the material for far healthier, happier, and less perplexed and anxious lives than most of us are living."-Phillips Brooks.

People go to the country in summer, but comparatively few of them come into a close intercourse with Nature or "catch her spirit." They know little of Nature because they have never been taught to appreciate what is in the earth and sky around them.

Children are taught too frequently facts about Nature instead of being brought into contact with Nature herself. The dead plant, or insect, or bird, does not appeal to them. They are living and working creatures themselves, and it is only a living and working mature that appeals to them.

Children and grown people to not respect sufficiently the life that is in amimals and plants. A canocing party of young people, as we read in one of our papers, surjorised "a sweet little fawn" taking its laith in a lake. In attempting to capture it alive one of its pursucrs struck it too hard with his pactede and emeded its days. Now of ald the beantiful wexodland things, a fawn is the most beantiful: and if theen yomer peophe hat been trained to respeet wikd life they world have beet content to watel this
pretty little animal enjoying its life and liberty without attempting to kill or make it a prisoner.

Opposite a station on one of the railways leading out of St. John stood a small bilberry tree on a path leading into one of the prettiest little rural cemeteries to be found in the country. In June, when the white blossoms of this beautiful tree enlivened the fresh green of the foliage, it was attacked by a horde of young people and literally torn limb from limb. Thus, to gratify a destructive instinct, and win a few flowers that would soon fade, a tree was destroyed that was a picture on the landscape and that must have proved a source of pleasure to hundreds of railway passengers every day.

Instances might be multiplied of this thoughtless tendency to disregard the rights of others. Teachers can do much to check it by impressing on the children that harmless wild animals are as interesting to watch at their play, and have as much right to live, as the tame ones about their homes; and that in picking flowers, those that others are accustomed to see and enjoy daily should be spared.

The Winnipeg Free Préss, whose editorials on educational subjects are always thoughtful and well written, closes an article on the need of good English with the following excellent suggestions:
"The remedy, if there is one for loose talking and worse writing, exists in the public schools. If the language in its purity is a precious thing, and if ability to make concise, intelligent written statements is worth striving for, then more attention must be paid to the study and use of language by those who are educating the young. One in a million, perhaps, might, like Abraham Lincoln, become a master of diction in its sublimest forms after a youth of scholastic neglect, but the average person can achicve good honest every-day English only after careful training in the plastic stages of youth. Thorongh training in oral and written composition is an urgent need in our educational system. At the sanne time these are difficult subjects to teach, because many of those whose duty it is to instruct the children in these subjects are by no means free from the prevailing inability to speak and write good English."

The schoolmaster asked the pupils: "Supposing in a family there are five children, and a mother has only four potatoes between them. Now, she wants to give every child an equal share. What is she going to do?" Silence reigned in the room. Everylooly calculated very hard, till a little boy stood up, and gave the unexpected answer: "Mash the jotatoes, sir."-Christiun Register.

## Our Waterfalls.

By L. W. Bailey, LL.D.

Who does not enjoy the sight of a waterfall? What boy or girl but will choose a waterfall as the objective point of his afternoon walk if there be one within reasonable distance, and especially if this be only an occasional pleasure, as determined by the melting of the snow in spring? Why, finally, does Niagara attract probably more tourists the year round than any other single locality, in America at least.

The interest in waterfalls may arise from various causes; partly, and no doubt largely, from their beauty, appealing in ever-varying aspects to our esthetic sense, as hardly any other natural phenomenon can ; partly, it may be, because they are beloved of the finny tribes as they are by us, and at their feet are often found admirable fishing grounds; partly, perhaps, because, having only an eye to the practical side of things, we become interested in them as possible means for the generation of power; but chiefly, I fancy, because they represent the energy of Nature in action, appealing to our imagination much as does any living thing in comparison with what is inert and lifeless.

Quite apart, however, from any or all of the above considerations there are other points comected with cataracts which, to the student of Nature, make them well worthy of careful study. Thus waterfalls are of many different types, and the causes which determine these differences are well worth investigation. Waterfalls, again, like the streams with which they are connected or of which they form a part, have well defined histories, never exactly repeated. They are factors, not only in determining the limit of human navigation, but in affecting the geographical distribution of many forms of waterlife, such as fish, cray-fish, etc. Drenched by their spray are to be found many beautiful forms of ferns, mosses, liverworts, etc., to be sought in vain among other surroundings. Some of these points may now be illustrated by more particular references.

Waterfalls, as regards their origin, are usually due to some obstruction to the continuous easy flow of a stream, and may therefore be found in any part of the latter, though most common in its upper courses, where, owing to the "youth" of this portion of the stream, there has not yet been time enough to wear the obstruction away. In fact waterfalls, as explained in the last chapter, are one of the indi-
cations of the youth of a stream. As the latter begins to carve its way it meets with different degrees of resistance in the rock material over which it flows, and the more resisting beds, less rapidly removed than others, naturally play the part of dams, holding the waters back only to descend at a much steeper angle when the barrier is overcome. Such rocks as granite, trap, freestone, slate and dimestone are quite unlike in their hardness and resisting power, and where there is a passage from the one to the other, and especially from slate to granite, or from limestone or slate to trap, falls are very apt to result. Thus at the Grand Falls of the St. John bands or "dykes" of black voleanic rock are seen at many points traversing the much lighter and softer calcareous slates, and have had much to do in determining the features if not the existence of the gorge and cataract; and similar conditions are repeated at the falls of the Aroostook, near Aroostook Junction, while the so-called Meductic Falls on the St. John, now artificially reduced to a rapid, the falls of the Miramichi and those known as the Pabinean falls on the Nepisiquit, and the Rough Waters near Bathurst, are the result of the existence at these points of hard granitic bands. In Nova Scotia a good illustration of a similar relation is to be seen in the falls of Bear River, three miles above the village of that name. But other factors may contribute to the result. Some rocks, like granite, are "massive"; others, like conglomerates, sandstones, slates and limestones, are stratified, i. $c$., arranged in layers or beds. These latter, moreover, may have their strata either horizontal, inclined or folded, often in a most complex way. Finally, all rocks, whether stratified or not, are marked by the occurrence of divisional planes, known as "joints" and "cleavage planes," which, by affording access for the eroding waters, hasten the process of removal as well as determine in large measure the character of the result.

Perhaps the simplest type of fall is that oceurring in unaltered horizontal beds. Good ilhstrations are furnished in the falls of the Nashwaaksis and in Skoodewapskoosis, near Fredericton, both in nearly flat beds of the coal formation. In the Grand Falls of the St. John, on, the other hand, and ind the tidal falls at the mouth of the same river, the highly tilted, and in the former ease greatly contorted character of the rocks, are conspichous features, readily noticed by all visitors. The influence of joint planes is best seen in connection with granite rocks. as witness the Pabinean Falls on the Nepisiquit and
the Pokiok Falls in York county. In the former instance the rock is divided by two sets of joints iato rectangular blocks, suggesting Cyclopean masonry, and from the edges of these one may look vertically downward into the deep channels to sce perhaps three or four large salmon resting quietly, but beyond the reach of any lout the privileged sportsmen. In the case of the Pokiok a similar structure has led to the production of a deep gorge, of which the sides, though atranged in zigzag fashion, are still accurately parallel. This parallelism led our first geolo gist, Dr. Gesuer, to suppose that the two sides of the chasm had been violently rent asunder, but in this, and all similar cases, the continuity of the rock across the buttom of the gorge and


PUKIOK GOKGE, YOKK CO., N. B. the fact that the sides show no downward convergence, as they would were the chasm due to an earthquake rent, show clearly that the result is che soldy to the wearing action of water guided by the natural fissure planes in the rocks.

The effects produced by the varying nature and attitude of the rocks is well shown in the case of the Gordon Falls on the Pollet River in Albert connty; just above the falls, named after a former governor of the province, the rocks are slates in a nearly vertical position, and here the stream occupies a deep gash so narrow as to be easily spanted by a highway bridge, while at and below the falls proper the rock is a coarse conglomerate, the wear of which, made more easy by the grinding action of loosened pebbles, at once leads to a considerable widening as also to another result claracteristic of many waterfalls, the formation of "pot holes." These are quite conspicuous at the Gordon Falls, and may lee seen in the accompanying cut, but are even more striking at the J'alsincan Falls of the Nepisiquit and in the gorge of the (irand Falls of the St. John. Here every stage of their prodnetion may be witnessed from slight circular depressime containing one or more pebbles, the movencmit of which by the whirling
waters is the cause of the phenomenon, to great pits or "wells" perhaps twenty feet deep and ten wide,


GORDON FALLS, POLLET RIVER, ALBERT CO. and which may or may not be connected with other similar holes by subterranean channels.
As regardsmagnitude the Grand Falls of the St. John and the reversible falls at the mouth of the river stand pre-eminent for breadth and volume of water. while in the former in:tance considerable haight ( 74 feet in the main pitch, or 117 leet between the upper and lower basins) makes it a source of power likely soon to be availed of for the gr neeration of electric energy. . For mere height Hay's Fall, a few miles below Woodstock, and the fall on Fall Brook, a small tributary of the Sonthwest Niramichi, are the most noticeable, each having a vertical descent of about go feet, but having litt'e water except in times of freshet, when each well worth a visit. Among the most picturesque falls in addition to those already mentioned are the Grand Falls of the Nepisicuit, the falls of the Tete-agouche and Nigadloo near latlurst, the Magaguadlavic Falls at St. George, and the falls of the Salmon River in eastern St. John county. Minor falls in New Brunswick are numerons and often interesting. but do not require special notice here.

In Nova Scotia. where the streans are mostly small, waterfalls are comparatively few and of no great size, but those of the Sissebon, near Weymouth, and those of liear River are noteworthy, as is that which constitutes one of the scenic features in the park at Truro.

One other feature of our water-falls deserves notice. They all have a history, As their formation. explained abreve, is the result of acar. it is evident that both their position and their character are subject to change. Like the streams of which they form a part they lave a begming. and a lite which may be a very profongerl one. while somer or later, by the removal of the comblitions which originate them. they must come to an end. The A Ioluctic. Falls, su called, has been reduced to the combition of a rapid:
the Narrows of the Tobique mark the site of what must once have been a cataract; the gorge of the Grand Falls is the result of the slow backward recession of the latter for a mile or more. In the case of the Niagara it is well known that the Falls have worked their way backward for a distance of seven miles, and a period of at least 10,000 years is believed, on good grounds, to have been required for the process. Probabiy a period equally long may have been needed for the formation of the gorge of the St. John at the Grand Falls and again for that of the Narrows above Indiantown, but in neither of these cases have exact calculations been made.

One remark more. Reference has been made to the fact that in the not distant future our grandest


FALLS OF BEAR RIVER, N. S.
cataract, the Grand Falls of the St. John, is likely to be employed as a means for the development of electric energy. This would necessarily mean the destruction of its scenic beanty. And possibly a similar fate awaits other waterfalls as well. Is it to be the case that the most interesting of the natural features of our country are, as in the case of Niagara, to be sacrificed to the utilitarian spirit of the age?

I'rofessor David E. Cloyd, principal of the Spokane high sclool, has givell out a statement that the percentage of boys registered in his school is greater than that of any other sclool in the United States. Four humdred and forty-six bovs and seven hundred and twenty-nine girls are enrolled, this making a percentage of little more than 37.6 boys in the school, against thitty-one per cent, the highest known percentage in other schools.

Educational Review $\mathfrak{w u p p l e m e n t , ~ R o v e m b e r , ~} 1906$.


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## The Teacher as Director of Play.

By Mre. Catuerine M. Condon.

The importance of play as a factor in education is now so generally admitted that the question naturally arises : Why have we not availed ourselves of it as a working force in our public schools? It will be said: We have done so, by providing spacious playgrounds, and, even in some favored localities, play-rooms under cover, for stormy days. But is this the only thing necessary to make a practical and efficient application of a well ascertained law of childhoorl? If play is so powerful a means of development, is it wise to simply send children into the playground at stated times, not only without direction, but even without any supervision?

The children are of different ages, and of very diverse physical conditions; some strong of body, often rough and overbearing, perhaps even disposed to cruelty; others, small and weak and so easily cowed that, although they may sometimes suffer severely from ill-treatment, they never dare utter a complaint, or bring an accusation against the offender. The teacher therefore remains ignorant of this state of affairs, which produces effects so demoralizing to character; the bully grows a still more insolent tyrant, while his victims, cringing and subservient, display all the mean vices of a nature warped by fear and the constant dread of ill-treatment. Nor is this all. The unbridled license of speech and manners, unchecked, because unobserved by the vigilance of those in authority, is such that parents have been heard to declare that they so dreaded the corrupting influence of the playground for their children that they had delayed sending them to school on that account. All these evils may be successfully dealt with by the simple expedient of the teacher going out on the playground with his scholars, not-as a restraint on youthful fun and frolic, but as a genial guide in the art of bright and intelligent play.

The mere presence of such a one would protect the weak and timid and help them to bring ont their value on the playground, by starting games, in which the weak and most timid would soon take an active part, and add to the interest of the play. By thus proving the usefulness of even the smallest child in adding to the interest of a game, a milder spirit and gentler manner would be induced towards the weak, for we are not apt to despise and injure those who add to our pleasures,

The petty tyrant wonld be taught that his method was not the best one to ensure compliance with his wishes, and that he who would rule others, must first learn to rule himself. He would also learn that to appeal to reason and self-interest, to the social instinct, and to the natural sense of pleasure that arises from well-concerted action on masse, throws mere brute force quite into the shade.

The aptitude for social games is not strong in children not yet well on in their teens, yet the social instinct is implicit in the youngest ; but it needs cultivation or the child may grow up narrow and selfabsorbed and incapable of harmonions action with his fellows.

Insight into character will be gained by the teacher far more surely on the playground than in the schoolroom alone, where the hand of discipline is, necessarily, somewhat repressive of natural impulses. Thut let no teacher flatter himself that he can he a power for good by simply sitting in a secluded corner, reading the morning paper, from the sladow of which be from time to time emerges to give a swift detective glance, or an admonitory shake of the head, or to point an uplifted warning finger at some mischievons urchin: for no mere spy will secure influence.

The teacher who would help his scholars to get the hest results from play must be hinself a real "Naster of the Revels" and bring the joyous spirit of a true comrade. His advent shou!d be the signal that something a little extra clever in the way of play is to be achieved.

Teacher and pupils would alike be refreshed and return to a room which, in their absence, has been wind-swept with fresh air throngh open doors and windows. No one shoukd interfere with this healthgiving process by remaining in the schoolroom during recess, except when the weather is inclement.

Ton often the teacher is associated with the incidents of hard lessons, confinement in a room poorly lighted, insufficiently ventilated and warmed, and with rebukes, which, no matter how well deserved, are none the less mpleasant. Why not offset all this by establishing the sympathetic relations of happy play?

The great schoolmasters have been noted for their keen interest in their scholars' sports, and have won respect and influcuce from them by the traditions of their own skill and prowess on fiekd and river. and in all manly exercises.

Children will not resent wise supervision on the playgronnl, for they appreciate order and arrange-
ment, and if the teacher has not left the spirit of childhood behind him, his help and suggestions will be eagerly accepted. A now proverb might well read: "Let me play with the children, who will may teach them."

Many a class might just as well, and, indeed far better, be taught out of doors-a happy reversion to an ancient custom. The three great Fathers of Greek philosophy,-Socrates, Plato and Aristotle.did much of their teaching in the open air. And the "Great Teacher far more often taught on the seashore and from the boat, the monntain and the desert than in the temple and the synagogues.

One of the most interesting lessons I ever saw was given in elementary surveying, the extensive grounds being measured and plotted, all the appliances being at hand, and the whole instruction given and received so clearly and so pleasantly, that, like all the best zeork, it was done so joyously that it was really play.

## The Misuse of Window Shades or Roller Blinds.

## (Erom an Inspector's Note-Book.)

The New Brunswick Board of Education, in common with most educational authorities throughout the world, is endeavouring to improve the character of the schoolhouses in the province. Especially is this necessary in the rural districts where it is not easy to command the services of an architect skilled in school plaming.

One of the points insisted upon in designing modern schools is that the windows shall be placed as near to the ceiling as possible. There are several reasons for this, but the chief is that the effective width of a room, as regards fighting, is $11 / 2$ (one and a half) times the height of the windows. But in too many cases where the windows have been placed properly, the value of their height is wholly lost owing to the blinds being kept down about half way. Considerable questioning of teachers appears to show that this is due sometimes to inattention or ignorance on the teacher's part. In other cases it is from a regard for the outward appearance of the buildings, the housewife's general rule of keeping the lower edge of the blinds on a level with the meeting rails of the sashes being adopted by the teacher. Still more give as the reasom the legitimate use of the blinds, namely, protection from the sun. In fact, this was the reason given the writer by a teacher in a $n o r \not t h$ room quite recentlu.

But whatever the reason may be, teachers should know that unless the sunlight be streaming in directly upon the faces or books of the pupils, too much light cannot be admitted into a schoolroom. At the present advanced state of the knowledge of school hygiene, the reasons for this need not be enlarged upon here, but it must always be remembered that sunlight is the best preventive of disease. Also that working in a poor light tends to weaken and destroy the eye-sight and working in a good light to preserve it.

Therefore, either keep your blinds right to the top of the windows whenever possible; or, better still, have the blinds fixed to the sill of the window frame and raise them when necessary to shade the pupils. By this mears the top of your windows will be free for the admission of light and, if necessary, for purposes of ventilation.

## From an Examiner's Note Book.

This is taken from the Kingston (Ont.) Whig, but it has the flavor of being a nearer-at-hand homeproduct: On the uses of food information was given as follows: "Food is a necessity and all who do not eat enough food will gradurally become weak and feeble and in many cases take the fever and die. It he!ps to keep up the body and it is digested and goes to different parts of the body to build it up. Why, if it wasn't for food I wouldn't be here writing these exams today. Food needs to be well digested and when you take a quarter of a pound of meat in one bite, it will do you no good except lay on your stomach and give you a stomach-ache."

## The Voice of the Wind.

The wind, when first he rose and went abroad Through the vast region, felt himself at fault, Wanting a voice; and suddenly to earth Descended with a waiture and a swoop. Where, wandering rolatile from kind to kiud, He woocd the several trees to give him one.
First he besought the ash; the woice she lent Fitfully with a free and lashing change Flung here and there its sad uncertainties: The aspen next; a fluttered, frivolous twitter Was her sole tribute: from the willow came So long as dainty summer dressed her out, A whispering sweetness, but her winter note Was hissing, dry and reedy; lastly the pine Did he solicit; and from her he drew A roice so constant, sof1, and lowly deep. That there he rested, welcoming in her A mild memorial of the ocean cave Where he was born.

- Henry Tavlor.


## The Song of the Pine Forest.

The pine forest is a wonderful place. The pine trees stand in rank like the soldiers of some vast army, side by side, mile after mile, in companies and regiments and battalions, all clothed in a sober uniform of green and gray. But they are minlike soldiers in this, that they are of all ages and sizes; some so small that the rabbits easily jump over them in their play, and some so tall and stately that the fall of them is like the falling of a high tower.

The pine trees are put to many different uses. They are made into masts for the gallant ships that sail out and away to distant ports across the great ocean. Others are sawn into planks and used for the building of sheds; for the rafters and flooring and clapboards and other woodwork of our houses; for railway sleepers, scaffoldings, and hoardings. Others are polished and fashioned into articles of furniture.

Turpentine comes from them, which the artist uses with his colors and the doctor in his medicines, which is used too in the cleaning of stuffs and in a hundred different ways; while the pine cones and broken branches and waste wood makes bright crackling fires by which to warm ourselves on a winter's day.

But there is something more than just this I should like you to think about in connection with the pine forest; for it, like everything else that is fair and noble in nature, has a strange and precious secret of its own.

You may learn the many uses of the trees in books, when men have cut them down or grubbed them up, or poked ho!es in their poor sides to let the turpentine run out; bint you can learn the secret of the forest itself only by listening lumbly and reverently for it to speak to you.

Nature is grander and more magnificent than all the gueens who have lived in sumptuous palaces and reigned over famous kingdoms since the world began; and though she will be very kind and gracions to chitdren who come and ask her questions motestly, and will show them the most lovely sights and tell them the most delicious fairy tales that ever were seen or heard, she makes very short work with conceited persons.

She covers their eyes and stons their cars, so that they can never see her wonderful treasures or hear her charming stories. but live, all their lives home. shat in, in their own ignorance, thinking they know all about everything as well as if they had mate it
themselves, when they do not really know anything at all. And because you and I want to know anything and everything that Nature is condescending enough to teach us, we will listen, to begin with, to what the pine forest has to tell.

When the rough winds are up and at play, and the pine trees shout and sing together in a mighty chorus, while the hoarse voice of them is like the roar of the sea 1 ipon a rocky coast, then you may learn the secret of the forest. It sings first of the winged seet, then of the birth of the tiny tree; of sunrise and sunset, and the tranquil warmth of noonday; of the soft, refreshing rain, and the kindly, nourishing earth; of the white moonlight, and pale, moist garments of the mist, all helping the tree to grow up tall and straight, to strike root deep and spread wide its green branches.

The voice sings, too, of the biting frost, and the still, dumb snow, and the hurrying storm, all trying and testing the tree, to prove if it can stand firm and show a brave face in time of danger and trouble. Then it sings of the happy springtime, when the forest is girdled about with a band of flowers; while the birds buitd and call to each other among the high branches; and the squirrel helps his wife to make. her snug nest for the little brown squirrel babies that are to be: and the dormice wake from their long winter sleep, and sit in the surshine and comb their whiskers with their dainty little paws.

And then the forest sings of man-how he comes with an ax and saw, and hammer and iron wedges, and lays low the tallest of its children, and bints them with ropes and chains, and hauls them away to be his bond servants and slaves.
And, last of all, it sings slowly and very gently of old age and decay and death; of the seed that falls on hard, dry places and never springs up; of the tree that is broken by the tempest or scathed by the lightning flash, and stands bare and barren and unsightly; sings how, in the end, all things shrink and crumble, and how the dust of them returns and is mingled with the fruitful soil from whieh at first they came.

This is the song of the pine forest, and from it you may learn this lesson: that the life of the tree and of beast and bird are subject to the same three great laws as the life of man,--the law of growtl, of wertience, and of self-saerifice. Aut perhaps, when gon are ehder, you may come to see hat these three laws are after all hoth one, bomad forever therether ly the golden cord of love.-Sclected.

## The Wayside Inn.

1 halted at a pleasant inn, As I my way was wending-
A golden apple was the sign, From knotty bough depending.
Mine host-it was an apple treeHe smilingly received me,
And spread his sweetest, choicest fruit
To strengthen and relieve me.
Full many a little feathered guest Came through his branches springing;
They hopped and flew from spray to spray, Their notes of gladness singing.
Beneath his shade I laid me down, And slumber sweet possessed me;
The soft wind blowing through the leaves
With whispers low caressed me.
And when I rose and would have paid My host so open-hearted,
He only shook his lofty head-
I blessed him and departed.
-Johann Ludzoig Uhland (translation).

## Feeding Birds in Winter.

Under the subject of "Feeding Birds in Winter" come two other subjects of even greater interest to the bird lovers, namely, "The Taming of Birds" and "The Changing of Both their Habits and Food."
The winter of 1903-1904, was an exceptionally hard winter for the birds; for this reason I thought it my duty to set a luncl-comuter for the feathered tribe. I tacked suet to the trunk of a big black walnut tree that grew fifteen feet from my window, and it was not long before the birds began to patronize it. They seemed to tell all the birds in the neighborhood of their happy discovery, for many birds appeared that I had never seen around the house before this time.

Every day the downy and hairy woodpeckers, red and white-breasted muthatches, chickadees, brown creepers, and blue jays came to eat the suet, while the juncos and an occasional English sparrow ate crumbs I scattered on the ground. The birds were not the only ones to enjoy the suet; several gray and red squirrels cane daily and carried away so much suet that 1 had to devise a new method for feeding the birds. I put out breal crumbs upon my window-sill. and the chickiatlees and nuthatches soon learned to come there for them. At first they were afraid of the open window, but they soon learned to eat withon foar. While 1 stood near with the window open.

She cokl morning I put some critmes in my hand. and held it out of the window. A little chickadee
came along, flew nearer and nearer; then came to a wire close to my hand; looked at the crumbs, then at me. After picking my fingers to make sure they were harmless, he hopped into my hand, ate some crumbs, and flew away to tell his mate what a daring little chickadee he was. After this he came daily to my, hand, and before long other chickadees and a red-breasted nuthatch followed his example. One day I succeeded in photographing my feathered friend, while eating crumbs from my hand. The nuthatches had a good deal of difficulty in getting to the window-sills. They could not grasp the smooth boards with their claws, neither could they keep their balance on the wire just beyond the sill. I took pity on them and made what I call a moving restaurant for them. I nailed boards together, which I suspended in mid-air by means of a wire. With a string and pulley I can move this from my window to the tree. Here I placed crumbs and water. The nuthatches soon learned to come here very gracefully, and before long they could stand up on their legs as well as any other bird. My muthatch is now as much a perching bird as a creeping bird.

The next year the brown creepers, juncos, an English sparrow and a downy woodpecker followed the example of the nuthatches and chickadees and came to the restaurant for food. I took several photographs of them.

The woodpeckers eat nothing but suet, while the juncos eat nothing but crumbs and seeds. The birds have a decided preference for doughnut crumbs, although they are very fond of bread crumbs. The brown creeper likes crumbs and suet, while the chickadees and nuthatches, although they will eat everything I give them, like nuts and squash seeds best. I crack the nuts for them and give them shells and all, while I simply break the squash seeds in two.

I shall contilue my study of feeding and taming the birds this winter, and hope to discover many other new facts about them.

I advise the reader of Bird-Lore to set a table for the birds this coming winter. and to watch their labits closely. It is surprising how the birds will appear in a neighborhoorl where there were no birds, when they find food and protection there.

I begin to feed the birds the last of October, and keep it ip regularly until the middle of April. The birds will not come to any artificial lunch-counter when they can get their natural food.-Samuel $D$. Robbins, Belnont, Mass., in Bird-Lorc.

## Plans in Geography and Nature Study.

"Every man's chimney is his golden milestone," says Longfellow. That is true, and in the child's case it is the milestone from which all his measurements are taken. The geography of the neighborhood in an ever-increasing circle must be his starting-point-from the school itself, with its entrances, hall and classrooms, on to the playground, thence to the country beyond. The child's classroom is the place from which he starts on his tour of geographical discovery. Its length, breadth, lieight-all measured by himself or his classmates and drawn by him to scale on his paper-these form his first memoranda. And until he understands in this way the meaning of a plan, by making one of a place he actually knows, he can never be expected to have the most elementary notion of the meaning of a map. Then the school buildings-measured and drawn in the same way-each step being actually done by the children themselves before anything is put on paper, before any definitions are attempted. And one word as to the much-abused definition. Do relegate it to its proper place, and that is-the end of a lesson. Let it be formulated by the children themselves and be the outcome of their own experience. If your lesson has been clear, and given in an intercsting, intelligent way, there will be no difficulty in getting definitions.
Now as to the geography of the immediate neighborhood. If you happen to be so fortunate as to live in a mountainous district near the sea, lessons on geographical terms will present no difficulty. Mountain, valley, river, lake, cape, bay-all can be exactly illustrated from the child's environment. But this is the exceptional case and not the normal, and it is the latter with which we have to deal.

But although only a few of us are provided with such rich material close at hand, let us not think that our own neighborhood is devoid of apt illustrations. The gutter of a steep street on a rainy day is an excellent illustration of the mountain stream from which the river grows. Its tumultuous, headlong race, as it dashes down the slope; the way in which it carries all light material down with it; its conduct when it meets a large stone or similar object in its course-all are truly illustrative of the characteristics of a river. And for further illustration there atre few districts in "Merrie England" that cannot loast a stream of some sort. An exeursion to a picce of rising ground near, noting exactly the difference between the view from the bottom
and that from the top, will form the starting-point for lessons on the horizon, hills, mountains, valleys, and plairs. Lessons on the points of the compass slould first be taken out of doors, where the children can make their own personal observations. In these outdoor lessons it is a good plan to provide the children with paper and pencil so that they can make rough sketches. No doubt these will be very crude, but the making of them will be invaluable in impressing the main facts upon the children's minds. We all know that the child often forgets what he sees, still more often what he hears, but rarely what he makes. The very co-operation of the muscles in reproducing on paper his ideas of what lie sees will doubly insure him being able to remember those ideas. Our children lave made at one time and another very creditable seaside sketches. Certainly there was some disproportion between the size of the islands and the ships sailing past them. The room taken up by the captain's telescope and the man at the wheel might slightly inconvenience any passengers on deck; the lighthouses bore a strong resemblance to the famous tower of Pisa; and the fish were first cousins to the whate of Jonali's acquaintance. But que z'oulcz-ious? The pictures represented truly to them what they had seen, and that is of even more importance than an accurate sense of perspective and proportion. - From "Child Life in Our Schools." (Gco. Pliilip and Son, London).

## Chat About Plans Between Uncle Tom and His Two Nephews.

"We will first fix upon a scale," said L'nc!e Tom. "Suppose we say our new scale is to be one foot to a quarter of a mile."
"And can you really make a foot stand for a quarter of a mile?" asked Dick.
"Yes, that's easy," said his uncle, as he spread the paper on the table.
"Fut 'what things can you show in a plan like that, uncle?" asked Harry.
"Y'ou shall see," he replied, and he wrote the letters N. S. V. W. on the four edges of the paper, to show the four cardinal points.
"Now," he said, "you know Buttercup Farm, where we live, stands at the corner of the read.
"Youn know tom dat, when you stand at the gate, amed leok down the road at twelve collock, the sum is straight in from of gon. (an youl whe from this which waty the road rums?"
"South," cried both the boys at once.
"And yon know that, if you turn your back to the sun at noon, you are looking towards the north," he added.
"Oh yes, unc!e," said Dick. "So the other end of the road runs north."
"That's right," said his uncle. "Now think of the road, which crosses this one, at the comer of the farm."
"That must run from east to west, for it goes straight across," said Harry.
"Right again, boys," said Uncle Tom. "Now let us start with our plan. We will begin at this point in the middle of the paper. I will draw two lines, side by side, from north to south, and two others crossing them from east to west."
"I suppose those lines stand for the road, mele," said Dick. "And the farm must be just here, where the roads cross."
"Good," said his uncle, "and I want to put in our house and the rest of the farm buildings next. They won't be very large, of course, on this paper, but our plan will show us where they stand.
"Now," he added, "I know it is just a quarter of a mile from our house to the churel at the end of the village. So if I measure one foot along the road towards the sonth, I shall know where the churel is to come. The Rectory stands facing it, you know, on the other side of the street. And the school is just half-way between us and the church. So we can put these in our plan now.
"A quarter of a mile along the road to the north is the chapel. The Park Farm is on the other side of the road, about half that distance from us. And behind it is the Manor House, where the Spuire lives. We will put them in mext, with the wood lying behind the Syuire's Honse.
"And now I must go." he adked, "lint you may mark in other places for yourselves, such as the sunithy, the butcher's shop, the baker's shop, the post-office, the Slade farm, Beek's farm, and so on.
"This, you see, is a plan of all the places for a quarter of a minile round us. We may call a plan of this sort a map."-MacMillan's Globe Gcography Reader, London.

The little boy's father hat come home from his office carly and was lying down for a nap before dimer. The litule lad's mother sent him upstairs to see if his father was aslecp. He rsturned with this
 11ヶnc!

## The Arrow and the Song.

IIENRY WADSWORTH LONGFELLOW.

## I.

I shot an arrow into the air, It fell to earth, I knew not where; For, so swiftly it flew, the sight Could not follow it in its flight.

## II.

I breathed a song into the air; It fell to eartl, I know not where; For who has sight so keen and strong,
That it can follow the flight of song?

## III.

Long, long afterward, in an oak I found the arrow, still unbroke; And the song, from beginning to end, I found again in the heart of a friend.

## NOTES.

This very dainty, beautiful poem is so simple it needs little talk or explanation. It needs to be quietly read, to be memorized, and not only recited in class, but to one's self alone, also. The teaching of the poem is very true, and told in various ways.

Mr. Longfellow uses a figure of speech-that is a form or way of speaking-that we call a simile. Look up this word in the dictionary. It comes from a Latin word, meaning like; we get our word similar from the same word. Read the first stanza, then the second; the first two lines of the third stanza, then the second two. Do you see the likeness or simile? In which stanza and pair of lines do we find Longfellow's meaning?

What does he mean by "a song" here? How did he breathe it-alond? carefully ? - how? Why didn't he know where it fell? What made him breathe it into the air?

There is an old song that says-
"Kind words can never die; Cherished and blest
God knows how deep they lic Hid in the breast."

May the same be true of beantiful words? noble words? One doesn't need to watch where such words fall. If his mind is full of them, he may keep speaking them and be sure he will find them again; only when one is most truly kind he thinks least of whether or not his kindness will be returned. It will be with them as with the "blessed of the Father" in what Jesus once told. (Read Mathew 31-40.) -School Nezis andPractical Educutor.

## Signs of Rain.

- The hollow winds begin to blow; The clouds look black, the glass is low. Last night the sun went pale to bed, The moon in halos hid her head. Loud quacks the duck, the peacocks cry, The distant hills are secming nigh. Low o'er the grass the swallow wings. The cricket, too, how sharp he sings. Through the clear streams the fishes rise, And nimbly catch the incatious flies. At dusk the squalid toad was seen Hopping and crawling oier the green. The whirling dust the wind oleys, And in the rapid eddy plays; The frog has changed his yellow vest, And in a russet coat is dressed.
'Twill surely rain; I see with sorrow, Our jaunt must be put off to-morrow. - Anonymoses.


## Lines in Season.

A teacher, Miss Evelyn R. Bennett, Hopewell Cape, N. B., sends a few quotations and the way she uses them, which may be a benefit to others.

The quotations are placed on the blackhoard. They are memorized by repeating in concert or singly, or by silent study. They are explained, and the good thoughts placed before the children.

Let your heart feel for the affictions and distresses of everyone.-Washington.
Associate with men of gond quality if you esteem your own reputation, for it is better to be alone than in bad company.-Washington.

Character consists in little acts well and honorahly performed; daily life being the quarry from which we buitd it up, and rough-hew the habits which form it.

A friend called on Michacl Augelo, who was finishing a statue; some time afterwards he called again; the seulptor was still at his work. His friend, looking at the figure, exclaimed "Have you been itlle since I saw you last?" "By no means," replied the sculptor: "I have re-tonched this part and finished that; I have softened this feature and brought out this muscle; i have given more expression to this lip, and more energy to this limb." "Well, well," said the friend, " all these are trifles." "It may be so," replied Angelo; "but recollect that trifles make perfection, and that perfection is no triffe."
The tendency 10 persevere, to persist in spite of liondrances and impossibilitics, it is this that in all things dittinguishes the strong soul from the weak.-Carlyie.
The men who try to do something and fail, are intintely better than those who try to do nothing and succecdLloyd Jones.
Failure after long perseverance is much grander than never to have a striving good enough to le called a fail-ure-George Eliot.
Blessed is he who has found his work; let him ask no other blessedness. He has a work, a life purpose; lhe lias found it and will follow it-Carlyle.

## A Psalm of Praise.

1. Nake a joyftl moise unto the Lord, all ye lands.
2. Serve the Lord with gladness: come before his presence with singing.
3. Know ye the Lord he is God: it is he that hath made us, and not we ourselves; fer are his people. and the sheep of his pasture.
4. Fnter into his gate with thanksgiving, and into his courts with praise: be thankful unto him, and bless his name.
5. For the Lord is goorl: his merey is everlasting: and his truth cudureth to all generations.

## NOTES.

What is a Psalm? This tooth Psalm does not look like poetry; but it is, as you doubtless will feel it to be as you read. Psalms were written to be sung, and sung responsively. If you will notice the Psalm above, you will see that each verse except the first has at least two parts, and, if more, they are arranged in pairs, for the most part. This was so that in the great temple the choir of priests might sing the leading part and the people respond by singing the second, thus (verse four) :

Enter into His gates with thanksgiving
And into His courts with praise:
Be thankful unto Him,
And bless Ilis name.
All nations believed in a god. The Jews taught the world of the "one living and true God." They wrote many Psalms, and those so beatiful that the world keeps singing them. The (ne-hundredth Psalm is one of the most notable for simple dignity and beauty. To appreciate it you must think of it as sung in So!omon's wonderful temple, when hundreds of priests were about the altar and tens-of-thousands of people were attending the worship. In I'salm cl. you will find a list of instruments in the orchestra. Read also Psalms cxlviii. and cxlix.

Thankfulness is one of the most noble feclings: and praise a most becoming form of expression. We shou!d learn the Song of I'raise by heart. Verse three gives the reason for verses one and two; verse five the reason for verse four. The Psalms are full of beautiful expressions like those of this onse.Selected.

A mother being asked if she had any trouble with her boys said: "No, I keep, them busy and I have their confidence." Do you know of a better receipt for the teacher?

## For the Little Folks.

## Friday.

It's heaps of fun to be a boy
When Friday comes along;
That day a boy don't mind a bit,
No matter what goes wrong.
Sometimes on Fridays we are good, A reg'lar model class.
The teacher smiles at three, and says,
"The first line rise and pass."
We get our hats; our books we strap;
And whistling a tune,
We hurry out. There's nothing like
A Friday afternoon.
You say it's odd that Friday should
A part so noted play?
Just ask a boy. He'll tell you why:
The next is Saturday.
-Arthur H. Folwell, in The Youth's Companion.

## First Lessons.

Priscilla went to school this weck She's only five, you know,
And for a very little girl,
She has not much to show.
The teacher gave her picture-books, With cats and mice and birds;
She thought she knew them all by heart, But oh, those horrid words!
She saw a big red cube
Along with yellow blocks;
She spelled out cube, but said it was
"A little baby box."
A frisky lamb was a speckled calf, The hammer was a hatchet.
Whenever she was in much doubt, She took a word to match it.
The spade she knew was a little hoc, The brook looked like a sea,
And every coloured pieture there Was as queer as queer could be.
Next day she would not go at all, And I heard Priscilla say,
"School may be nice for grown-up folks, But I'd much rather play."

- M. S. Humphrcyzille, in The Youth's Companion.


## Autumn Leaves.

"Come, little leaves," said the wind one day,
"Come over the meadows with me and play;
Put on your dresses of red and gold;
Summer is gone and the days grow old."
Soon as the leaves heard the wind's loud call. Down they came fluttering, one and all; Over the brown fields they danced and flew, Singing the soft little songs they knew.
" Cricket, good-bye, we've been friends so long;
Little brook, sing us your farewell song-

Say you're sorry to sce us go;
Ah! you are sorry, right well we know.
" Dear little lambs, in your fleccy fold,
Mother will keep you from harm and cold;
Fondly we've watched you in vale and glade;
Say, will you dream of our loving shade?"
Dancing and whirling the little leaves went, Winter had called them and they were contentSoon fast asleep in the earthy beds, The snow laid a soft mantle over their heads.

## The Old Mill.

Stream that hastens from the hill, Tarry here to turn the mill. Rainbow drops the seedlings knew In the shower and the dew, Once again your magic lend, Life into the mill wheel send. Nature, the all-bounteous mother, Beast and bird, and man their brother, Through the spring and summer weather Steadily have worked together.
E'en the earthworms in the soil Give their share of patient toil. Sturdy oxen drew the plow
Where the stubble standeth now. Horse and farmer reaped the grain
From the sumned and watered plain.
Now upon the old mill's floor
Lies the yellow harvest store,
Till the all-transforming wheel
Turns the kernels into meal.
All have helped to give the bread
Over which the grace is said.
-Laura Winnington.

## The Snow Flowers.

When birds to sun-land southward wing,
And chilly winds begin to blow,
The babies that were born in spring
Think all delights are ended so;
But Jack Frost laughs aloud, "Ho! ho! There's joy ahead they little know. They have not seen the snow!"

Then he begins to call his sprites
From the bleak, trackless north afar,
Where each one in the frozen nights Has made from ice a crystal star. And Jack Frost laughs in glee, "Ha! ha! These shine like bits of glittering spar, What flowers fairer are?"

And from the clouds he rains them down Upon the cheerless earth below;
So thick they cover field and town, So fair the brooks forget to flow, And Jack Frost laughs, well pleased, "Ho! ho! Could summer whiter blossoms blow?
What think you of my snow?"
-Arlo Batcs, in St. Nicholas.

## TEACHERS' INSTITUTES.

## P. E. Island, Association.

The P. E. Island Teachers' Association met at Charlottetown, October 1 oth and 1 ith. Ainong the many excellent papers read was that by Mr. C. J. McMillan, B.A., of Prince of Wales College, on The Teaching of English. Mr. McMillan contended that there ought to be a reformation in the otder of teaching in the schools, and that at every stage the English language and literature should lead all others. English is the instrument of instruction. The reform should, he maintained, begin at the bottom, not at the top. The work of teaching good English ought to and must be continuous through all classes and grades. That of the primary years is the more important because it is the deepest and most lasting. In teaching English, poetry should precede prose. hegin with mursery rhymes and poems. Children are by nature imitative and they soon begin to appreciate the beauty and smoothness of good poetry. The teacher should be careful about manner of expression, for the teacher is the chief guide. But a taste for the sturly of the best literature in prose and poetry should be developed. Utilitarian methods are too much in evidence nowadays. There should be impressed upon the youthful mind more of hope, faith and love, together with earnestness, sincerity and refinement,-finding expression in thought, action and language.

Mr. A. E. Winship, of Boston, gave a fine address on Boys as an Asset, and Mr. Theodore Ross another on The New Education.

The officers for the ensuing year are: President, Walter Jones, Pownal: Vice-president for Queens County, James Profit, New London; Vice-president for Kings County, J. L. Kennedy, Souris; Vicepresident for Prince Connty, D. J. Nullin, Cape Traverse; Secretary-treasurer, R. H. Campbell, Charlottetown; Recording secretary, Charles MeDuff, Wiltshire.

Additional members of executive, Mr. Landrigan. Miss Noonan, Mr. Scaman, Mr. Allison Cameron and Miss Clarke.

Resolutions recommending the shortening of the school sessions to five hours all the year round, and asking an advance in teachers' salaries, were passed.

## Westmorland County Institute.

The twenty-ninth amual session of the Westmorland County Teachers' Institute was held at Shediac, September 27 and 28. Inspectors ()lithus, and Hebert were present, and over eighty teachers were enrolled. Mheh regret was expressed lecause of the absence through ilhess of Principal Oulton of Moncton. and a letter of sympathy was forwarded to him. President A. D. Jonah delivered an adkress on "The Teacher in Relation to the Schenl:" Inspector Hebert, one in French on "(ieneral Thpies." A paper both interesting and instructive on "The McDonald Institute, Guelph," was read by Miss

Smith, of Lewisville. It was discussed by H. B. Steeves, W. A. Cowperthwaite, the President, Miss Colpitts, Mr. Dole, Inspector O’Blenus and Rev. A. F. Burt.

A paper on Drawing, with blackboard illustrations, was read by Miss M. McBeath, of Moncton. An amimated discussion took place on this paper with reference to the "Augsburg Drawing System." A lesson on Number was taught to grade two by Miss Horsman, of Upper Sackville.
The closing session took place on Friday afternoon when the institute was divided into sections and matters of general interest to those different sections were brouglat up and discussed.

## United listitute of York, Sunbury and Queens Counties.

This Institute met at liredericton, October 11 and 12, President Chas. D. Richards, A.B., in the chair. Over one hundred teachers were enrolled. The address of President Richards, now principal of the Woorlstock, N. B., Grammar school, was carcfully prepared and thought ful. (We hope to publish this in whole or in part in a future number.-Editor.) Dr. J. R. Inch, Inspector N. W. Brown, Miss E. L. Thorne, Principal B. C. Foster and Mr. F. A. Good discussed the address. Mr. M. A. McFarlane, 11. A., read a valuable paper on History. explaining how this study prepares pupils for the responsibilities of citizenship. It teaches accuracy, awakens an interest in books, and affords an opportunity for tiscussion which other subjects do not.

Mr. J. T. Horsman, M. A., of Gagetown, read an intcresting paper on Arithmetic, emphasizing the necessity of more study of mental arithmetic.

Dr. Inch asked if it would be possible to complete the sturly of arithmetic in the eighth grade and do away with the subject in the High School curriculum. Messrs. Horsman, Page, Foster, Brown and Richards thought it could not be completed before entering the high school.
l'rincipal ()sborne, of the Fredericton Business College, read a paper on Writing, giving special importance to the technicpue of the subject, and Principal I. W. Hill, of Gibson, presented an excellent paper on the Teaching of Geography:

The claims of the New Brunswick 'Teachers' Association were placed before the institute by Mr. Hughes, president of the Ferelericton branch, and Mr. l'. C. Foster, a member of the executive, and a summary given of the work it has done.

I'rincipal liridges, of the Normal School, gave an interesting address on the Training of the Amonory. His paper was listened to with pleasure by all those in attendance.

The following officers were elected: I'resident, Mr. John E. D'ase. Fredericton: Vice-president, Miss lhucham, Keswick Ridge; Secretary-treasurer. Miss Eilla Thorne, lirederictum. Diditional members of the exccutive, Diss fuch and l'rincipal James A. Hughes.

## Victokta County Instmuts.

The ammal mecting of the Victoria County Teachers' Institute, trok place at Andower on the ath and 5 th October. Twenty-theee teachers enrolled themselves as members.

The etticen elected were as follows: Guy J. Mcedam, Iresident; Miss Jance Currie, Vice president: Miss Millie J. Gemodine, secretare: The Misses Hughes and Horseman were appointed to serve on the exceutive committer.

Unfortumately, the Inspector, 1. 1. Meagher was unable to attend. Miss Janet Curric read a paper on Disciphine, which prowed to be of exeeptional merit. Mr. G. J. Medtam's puper on the Thaching of language wins very interesting.

During the session on liriday monning, the lustitute adjourned in a bexly to the sehoul garden: where twenty minutes were sery protitably spent in the inspection of the varions flowers and vegetables which the early frests had not entirely destroved. Mr. Meddam explainey what he considered the best way to set about acyuiring a plot of gromel. and how the land should be treated the first year.

Not the least interesting part of the meeting was the five minutes" discussions her each member of the lustitute on the "litsy Weork" enplosed in his or her sohool. "This was an new feature in the mand procedings and was roted a complete success.

The public nketing in Beveridse's Hall was well attended and proved what attention the canse of education receives in Adolower. The speakers for the evening were Messrs, Raxter, Lawson, Elliot, and the Rev. Mr. Squires. Mr. Ellion's address was worthy of special notioc. He spoke brietly of the general duties of teachers, and he urged the trusters not to allow the cream of the professiom to seek situations elsewhere, hut to ratise the salaries of the ir leachers, and thes show be actions as well as words that they appreciated their effersts in their childrems belualf.
A. J. Combine.

> Scictany of lnstituta.

Grand Falls. Wetoher Sith.

The Kent Comety Teachers Institute met an
 siding. Thireverne teathers ontolled. The president opered with in admirable address on the Thorough15 Qualified Ceacher. Miss M. Wethea Wathen fonlowed with a paper pleading for more attention to music.

At seceme session, Miss Mimnic A. Buckley tausht the idea of spherical form to pupils of tirst grade, her lessom being fanably eriticized. (G, 1). Siecl read a paper emphasiong the great improance of befintemes in leaching
 the … R, TV. A., heili a meetins. A. E. l'earsim.
 : whed, wenterwo were or beazac, monlers of the

Union. The proceedings of Chatham Convention were ratified, and same salary schedule adopted. J. A. Edumuds was elected delegate to the Easter Convention, with H. H. Stuart, alternate.

The public meeting in the evening brought out strong speeches from Messrs. Pearson and Stuart, in favor of parish school boards, corsolidated schools, compulsory attendance, houses for teachers and a persion system.

At third session, J. A. Edmunds gave a helpful illustrated talk on Arithmetic, and Miss Ferguson read a timely paper on Spelling. At fourth session, 11. H. Stuart spoke on the great Educative Value of Geography, and was supported in discussion by Messrs, Pearson, Edmunds and Rev. W. M. Townsend. Mr. Pearson followed with a paper on Ideality; showing how school grounds and houses can he improwed at little expense. The last hour was given to the "question box." Most of the disenssion was given to Grammar, our texts being roughly criticized.

The following officers were elected at close of best lustitute hele in Kent for a long time: President, A. E. l'earson, Bass River; Vice-president, Miss M. C. Melnermey, Rexton; Secretary-treasurer, H. H. Sthart, Harcourt. Additional executives, G. D. Sted and Miss Agnes lierguson, of Richibucto.
H. H. Stuart, Secy.

## に゙ntis Couste Institute.

The Kings Cominty lustitute met at Norton, on Septemker 2-th aud 28th. Eighty teachers were eurolled. A mumber were present from the upper parishes of Queens. The l'resident. A. E, Floyd, excupied the chair. The following papers were rend: History, by A. C. M. Lawson, and Manual Training. hy W. N. Bigear, both were followed by interesting and profitable discussions. Excellent lessons were given by Miss M. A. MacVey, on Movenents of the Earth: Diss Belyea, on Reading; 11. A. Prebble, Grammar: and Miss Marion Mcore, Latitule and Longitude. A grood exhibit of work done in the schmols was also shown.

A public meeting was held on the evening of the 2 2th. Rev. Mr. Perry presided. Speeches were delivered by the chairman, haspector Steeves and D. iv. Hamilten.

The following are the officers for next year: 11. A. Prebbke, tresident: Miss Pearl Currier, Vicepresident: H. 11. ligyar, Sceretary-treasurer, A. E. Floyd and Miss Margaret belyen, additional members of the executive.

## Ahemt County Institute

The twenty-ninth ammal mecting of the Abert Comey Teaciors" mstinte was held in the Superior Sthool building. Elsin, Derober 4 and 5, the President, (ies) I. "Trueman, M. A., in the chair. Fortytwo teachers were present. The president, in his opening address, called attention to the keaflets that had bein sent for distribution by the New Brunswick

Teachers' Association. He stated that these would be distributed, but he thought further discussion of the work of the Association was foreigen to the purpose of the institute. In discussing the question of low salaries, Mr. Trueman stated that the greatest injustice was done the experienced teacher. Girls and boys who went from the home schools to Normal school and spent there four or nine months, had not a great deal of money invested in education. They probably received as much salary at lirst as their companions who had grone at other work. Salaries, however, should increase year by year as the teacher becones more valuable. Mr. Trueman believed that the Normal school course shoulat le longer. A longer course contd make the teachers more valuable and would probably decrease the mumbr yearly entering the profession. This would lead to a natural increase in salarics.

Mr. G. R. Wortman, principal of the school at Harvey, read a carefully prepared paper on the Teaching of History. The paper was discussed by Messrs. Colpitts, Burns, Branseombe, Adair, and Miss Floyd. A paper was preselted by Miss Clara G. Turner, teacher of Honsehold Science in the Riverside Consolidated scheol. The writer matke a strong ease for her subject in the Common Schents, and her paper was greatly enjoyed by all. Mr. 'Trueman, in discussing this paper, said that Miss Tormer was making a thorough suecess of the work in Riverside. Although not particularly enthusiastic about the manual subjects a year algo, he was now convinced that they were most valuable from every standpoint.

Miss Edna M. lifoyd gave the outline of a lesson in Geography. This lesson aroused a g (h)d deal of interest, and in the disenssion that followed the forlowing took part: Inspector ()'likens, Miss Bray, Mr. Bmascombe, Mr. Burns, ind Mr, Mätapatrick: The present text in geography canme for a grox deal of unfavorable criticism. At the close of the discussion Inspector (oblemus opened the Arithuntic guestion box, and proceeded tor show how to med many of the difficultioss found in teaching this sul)ject. This part of the programme was found to be most interesting and proftable.

Thursday evening a well-attended public meetang was held in the Baptist church. The speakers were President Trucman, W. D. Jomilh, Inspector O'Blenns, and Kev. If. A. brown.

Firiday morning's session onened with a paper on Nature Stuly by 18. Peacock, the Manual Praining and Nature Study teacher of the Riverside (imsentidated school. The piber was well received, and a motion wats passed asking 1)r. Inch to publish it in the educational report. The disenssion was openem by Mr. (i. A. Alair, of Hopewell Hill. Miss Rebecea Bennett then gave a practical paper on (omposition in the Drimary (irates. Whe discussion was opened ly Miss Keith. Mr. I'erey littopatrick presentect a paper on Spelling, which was well raceived. He lelieved in learning to spell by means
of the eye rather than the car, and had little use for any extrenc reform in spelling.

At the fourth session the oflicers for the ensuing year were elected as follows: Gicorge J. Trucman, President; Miss Edna M. Ifond, Viec-president; Percy A. lïtzatrick, Secretary-treasurer. 1. K. Hetheringom and Miss Margarey Jolnson, additiomal members of the exechtive, It was deceded to accept the invitation of the Westmorland Institute, and, with the consent of the Chinf Superintemente, to hold a joint mecting in Moncton next year. Votes of thanks were extemsed to Mr. Hetherington and Miss Johmson, the lecal teachers, who had done so much to make the meeting in bik in a pleasant one; and to Inspector ()'Blems, for his ready and efficient help.-Com.

A certain leanned professor in New York has a wife and fanily, but, professor-like, his thonghts are always with his lrooks.

One cevening his wife, who had been ont for some hours, returned to find the bouse remarkibly guied. She had left the children playing alome, but now they were montiove to be seem.

She demanded to be whel what had become of Hom, and the professme explained that as they had made a gexed deat of moise, he hatd put them to bed without waiting for her or calling at maid.
"I hope liey gave you no tronble," she said.
"No," replicel the professor, "with the exception of the ore in the cot here. He ohjecter at goot ilal to my undressing him and putting him to bed."
"Why," she exclaimed, "that's little folumy Giecen, from next door!"-ladics Itrme Journal.

Copenhagen, Demmark, is a city of camals and cleanliness-a land of pure delighte, free from beggars, orgall-grimders, and stray dogs. The inlabitants thereof are born cometeons and serom never to have recovered from the habit. When a passenger Imarats a car in Copenhagen he exchanges groctings with the conductor; a gemtenam, on hoaving the car, usially lifts his hat in acknowledgement of a salute from the official. When at fare is paid, the combluetor drops it into his cash-box, thanks the passemger and gives him a little paiser receipt. He offers change with a preliminary "!he so gooch," and the passenger accepts with thanks. If, in addition, transfers are repuited, complimentary exelanges gro oll inderfintely. Ya there is always time emongh in (opponlagen--Four-Track Neaes.
"Por teach at child ter reall and mod trach it what (1) rearl is to pult a dingeroms weanem into its


## N. B. Teachers Association.

From a late circular ptblished by the New Brunswick Teachers' Association the following encourageing statements are made. It has now members in every city and in thirteen counties of the province, and is fast becoming a power for good in edtucational circles:
From 1884 to 1902, salaries of all elasses of New Brunswick teachers steadily declined; but since the N. B. T. A. was initiated in Albert County, September 26, 1902, salaries of every class have increased, the gains from June 30 , 1902, to June 30, 1905, being for each class as follows: First class males, $\$ 67$ per year; second, $\$ 30$; third, $\$ 15$. First class females, $\$ 24$; second, $\$ 16$; and third, $\$ 9$. The aggregate gain to the profession in those three years was $\$ 24,472$, white the amount of dues paid to the N. B. T. A. and its subordinate associations did not exceed $\$ 500-\mathrm{a}$ very good return for the investment.

The Association having succeeded so well during its first three years, when only a small nart of the profession, mainly of the higher elasses, were enrolled, what may it not accomplish when all, or the majority, of the unorganized teachers become members!
The National Teachers' Union of Great Britain, founded in 1870, includes over three-quarters of the profession, and has succeeded in bringing salaries and teaching conditions up to a respectable level, and is constylted by the British government before any important legislation respecting education is introduced. The Chicago Teachers' Union has since 1896 revolutionized conditions in that city. The Nova Scotia Teachers'. Union, organized in 1896, has succceded in securing from the provincial government a system of pensions for teachers. What other teachers lave gained, we may gain if we unite and work together.

The total number of members in the British House of Commons is 670 ; in the Hotise of Lords, 594. Probably the number in the House of Lords now is over 6oo, for several peerages have been ereated during the last few months.

## CURRENT EVENTS.

Five hundred teachers of Great Britain and Ireland are coming to Canada and the United States to stutly edtucational conditions, and will remain here froin four to twelve weeks. They are sent out at the instance of Alfred Moseley, M. P.. the millionaire, who has already done so much for eltucation. The expenses of all will he paid. This is a great opportunity. Who will to the same for a few homdred teachers of Canala. The Summer Sehool of Science of the Atlantic Provinces, a few years ago, tried to formulate a plan to hold a travelling session in Europe. Has that scheme been abandoned? There is much to be said in its favor.

It is expected that 1 forculanemm, the ancient Roman city, buried by the ernption of Vesurius at the time of the destruction of Pompeii, will be

excavated by the united action of the governments of Great Britain, France, Germany, Italy and the United States. Many valuable manuscripts and works of art undoubtedly are buried there; for Herculaneum was the place of residence of many wealthy Romans, and, unlike Pompeii, it was covered deep with earth, and not destroyed by fire.

An agreement made between the British government and the United States regarding the rights of United States fishing vessels on the Newfoundland coast, though it is, of a temporary nature, has given much dissatisfaction in Newfoundland, as it confers upon the foreign fishermen certain privileges which the Newfoundland government has denied to resident fishermen in the interests of fishery protection. It is said that the United States fishermen will voluntarily relinquish these privileges; but that is so very unusual that it is hard to believe.

The military occupation of Cuba by the United States forces has taken place withont disturbance. The disarmament of the insturgents has thus far been effected without resistance. The country is to be governed for the present by United States officers in the name of the Cuban people and under the Cuban flag. But the independence of Cuba is indefinitely postponed.

In Russia there is a large socialist party that will never be satisfied with any constitution which respects the right of private ownership in land. The socialists claim that every man shotld have as much land as he can cultivate maided, and no more. The idea is not new in Rtussia, where communal lands are redistributed from time to time; but the socialists seek the abolition of all private property, and the application of this principle to all the land. Therefore, there is fear that the new Russian parliament, which is to meet in February or March, will but precipitate a threatened revolution instead of establishing a strong constitutional govermment under the present Czar.

The persecutions of the Jews in Russia, because of their disloyalty, has led to a rapid and very general emigration, which tends to remove one disturbing element. Most of them come to America.

The Canadian government is to take over the dockyards at Hatifax, now the property of the Imperial government. The transfer will be made in a few weeks.

The British parliament has re-assembled, and a disturbance made by disorderly women marked the opening day. They were adrocates of woman suffrage, who thought they were thus advancing their catse.

The Shah has opened the new Persian parliament in person, with a speech from the throne. which was received with the greatest enthusiasm. He believes that his people are ripe for constitutional government, and will support the constitution which he has given them.

Manitoba is asking for a portion of the old territory of Kewaytin, to extend the bounds of the province as far as Fort Churcliill, on Hudson Bay.

An Anstrian inventor claims that common marsh reeds are far superior to wood pulp, for the manufacture of paper, and much cheaper.

Late statistics slow Hong Kong to be the foremost port in the world in respect to import and export tonnage. Next comes London, with nearly the same amount of tomage : followed respectively by New York, Hamburg, Liverpool and Rotterdam.

The rebellion against Turkish anthority in Arabia still continues, the Arabs lraving recently won a victory over the Turkish troops.

The new British battleship" "Dreadnaught" has proved faster and better in every way than was anticipated; but three armoured cruisers now under construction in Great Britain will be ships of equal power with the great lattleship, and very much faster.

The native ruler of Barotseland. Central Africa. has abolished slavery in his dominions, selting free thirty thousand slaves.

Four thousand people, it is stated. have been put to death withott warrant in the C'nited States in the last twenty-five years. Ninety-five per cent of them were negroes, killed by their white neighbors. and many of them innocent of the crimes charged against them. The real canse of the race hatred is that the negroes claim equal riglts under the constitution of the United States, which the whites are not disposed to yield. The same intolerant feeling. in lesser degree, is shown towards Chinese and Japanese residents in some parts of the country: and strong resentment is expressed in Japan against the exclusion of Japanese children from the schools of San Francisco. All men have equal rights in Canadla, without regard to race or color: but we may not boast that there is here no race prejudice. Asiatic immigrants are not very cordially received on our Pacific coast.

## SCHOOL AND COLLEGE.

The Dalhousic College evening school and the King's College school of engineering have lieen amalgamated unter the name of the Cape Breton Technical School, with Professor Dahl as principal. It openef on the 23 rd October. White college work in the ordinary sense of the word will not be underaken, this school will be affiliated with Dallousic and King's Universities, and the work done in the ciasses will he recognized in both institutions in the cases of students afterwards pursuing engineering courses at cither Dalhousie or King's.
The University of New Brunswick has a freshman clacs of forty-five students, the largest in its history.
Dr. Hall, of the Truro Normal School, han returned from his trip to England.
The following were elected as the executive of the Nova Scotia Teachers' Association at the recent mecting at If:li-
fax: Principal J. II. Trefry, Halifax; lnspector H. H. MacJntosh, Lunenburg; G. 1). Blackadar, Yarmouth; Dr. W. II. Magee, Annapolis; Principal W. J. Shiekds, Hants; Inspector Macdonald, Antigonish: Principal E. B. Smith, Port Hood; Principal Thomas Gallant, Inverness; Principal J. T. McLeod, Pictou; N. McTavish, Parrsboro; Vice-principal Stewart, Sydney.

Acadia University opened October 5 with seventy new students on its roll. No successor to President Trotter has yet been appointed. Professor R. P. Gray, who succected Dr. Kierstead a year ago as the professor of English language and literature. gave the opening lecture on Poetry and the Education of the Spirit, a fimished production. Professor Firnest R. Morse, a teacher of experience, and a graduate of Acadia, takes the place of Dr. C. C. Jones as professor of mathematics.

## RECENT BOOKS.

Messrs. Gim \& Company, Boston, have just puhlished a revised edition of Myers's Gencral History (mailing price $\$ 1.70$ ). This is a book of nearly 800 pages, attractively bound and illustrated. As it contains a complete history of the world from the time of the carly Eastern nations to the present, it is a useful book for the library of the general reader, as well as for the student who would follow in sequence the events of the history of mankind. It has been a favorite book since its first publication, sixteen years ago, and the fresly chapters, new series of colored maps, many portions re-written. with suggested books and special topies for further study. make the compendium a most valuable acquisition to historical readers.

From the same publishers we have a small volume ( I 38 pages, mailing price 85 cents) by the same author-Outlines of Nineteenth Century IIistory-affording a rapid sursey of events from the Congress of Viema (1815) to the Peace of Portsmouth, and recent events in Russia and other parts of the world. The book is a motel of concise statement and instructive unity.

Ginn \& Company puhlish a series of standard English Classics, edited with introduction and motes adapted for college entrance requirements or for private readers. The bonks, carefully ecfited by scholara of taste and discrimination, are beautiful examples of binding and printing, and their contents such as may be read with pleasure. They are: Mrs. Gaskell's graceful story, "Cranforel." (mailing price .5 cents) ; Mathew Arnold's "Sohrab and Rustum," with other poems hy the same author (mailing price so cents); a condensed sclool edition of the Autoliography of Benjamin Franklins (mailing price 4.5 cents) : Dickens's "A Tale of Two Cities" (mailing price ( $x$ cents) ; and Selections from Browning's Poems (mailing price 35 cents).

Supt. of Scliools O. J. Kern, of Illinois, has done a real service to commery schools in his look, "Among Conntry Schools." published by Gim \& Company, Boston. The volume contains chapters on "The Country Child's Rights, The Outdoor Art Mowement. Sclool Garlens, Art for the Country Child, The Work of a Farmer Lhoys' Experiment Club, Educational Excursions, The New Agriculture and the Conntry School, Consolidation, The Training of Teachers for the Country School. It is well illustrated. and

there is scarcely a page in it that is not full of fruitful suggestions on the possibilities of greater efficiency of rural education. Referring to what Sir William Macdonald is doing for Canadian rural schools, the author says: "If millionaires of the United States would find it possible to do as this man is doing-doing something for the country child-a great educational unlift would come to the agricultural interests of our country, and, in fact, to all country school work." (Pages 366 ; price $\$ \mathrm{r} .25$ ).

Messrs. Blackie \& Son, London, publish a First Course in Botany, by J. F. Scott Elliot, A. M., B. Sc., pages 344, price 3 s . 6 d . The book is a wholesome combination of theory, practice and obscrvation, and the author names a great number and variety of plants for laboratory work. He begins with the flower and the seed, leaving germination and growth for a more advanced stage in the book. The notes on structure, enviromment and distribution are very useful, and to the whole forms a valuable compendium of plant study, though rather for the advanced student than for the beginner.
The same publishers issue an interesting and varied collection of Kindergarten Occupations for the School and Nursery, profusely illustrated, price 1 ; ; also The Kindergarten Room, containing lessons, games, stories and occupation. These denote an advancing interest in Kindergarten work.
In their "Modern Language Serics," Messrs. Blackie $\&$ Son publish an interesting series of stories and poetry:

Un Pctit Voyoge à Paris, by Marguerite Ninet; price $1 s$. 6d; Molière's Les Précicuses Ridicules (8d.) ; Bedollière's Historie de la Mere Michel et de Son Chat (is.) ; also a Skeleton French Grammar (2s.), a useful guide to the beginner. In Blackie's "Little French Classics," price 4 d . each, we have Alfred de Vigny's Historic de L'Adjudant, there is a delightful series, Petits Contes pour les Enfants, there is a delightful series, Petits contes powr les Enfants, in paper covers, price 4 d . each. All the above readers have vocabularies, and the more difficult are provided with notes.
In Latin, Blackie \& Son, London, publish extracts from Livy's The Second Macedonian War, illustrated, with notes and vocabulary (is. 6d.) ; in "Blackie's Latin Texts" we have Casar's Gallic War, Book I, (6d.), with an introduction on the author's character, works and style; a very convenient cdition of Junior Latin Syntax, by J. A. Stevens, B. A. (8d.),-excellent for reference.
In the New Century Geographical Readers, Book V (Is. 6d.), Blackic \& Son, London, deals with the physical, political and commercial geography of the countries of Europe, illustrated,-an interesting book, the matter being very attractively arranged.
The Geometry of the Screw Propeller (Is. 6d.) is a little book for the use of engineering students in technical schools. Blackie \& Son, London.

Archihald Constable \& Co., Ltd., London, are publishing a series of interesting books (Is. each) on "Religions,

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Ancient and Modern." Those we have received are: The Religion of Ancient Scandinavia, The Mythology of Ancient Britain and Ireland, Magic and Fetichism. The series is in convenient pocket voiumes, printed in good type, and with foot-notes.

George Philip \& Son, Ltd., London, publish a Progressive Course of Comparative Geography, which provides a full and definite course of geography teaching. The arrangement is admirable; nothing is scemingly omitted to make the book complete. It is illustrated hy 177 pictures and diagrams, and 172 maps and diagrams in colour, with index.
A.Rhythmic Approach to Mathematies is the title of a unique little volume, illustrated, from the same publishers. It shows bow, with a few cheap materials and simple apparatus, the geometric instinct may be evoked in children.

Sir Oliver Lodge's work on Easy Mathenratics, recently reviewed in these columns, is published by the Maemillan Company, of Canada, Toronto.

Wm Briggs, Toronto, publishes a Ilandlook of Canadian Litcrature (English), by Archibald MacMurehy, M. A. The author states that the reason of the book's existence was the need, as a teacher, of such a work on Canadian authors. It has biographical sketches of most of our writers of poetry and prose, with estimates of their place in literature, accompanicd in most cases with extracts from their works. It is a valuable compendium, and will prove of distinct service to teachers.

## RECENT MAGAZINES.

One of the most striking figures in the recent development of Japan, Admiral Togo, is the subject of a deeply interesting article by Mrs. Hugh Fraser in Littell's L.iving Age for October 27. A Negro on Efficiency, by Miss 11 C. Foxcroft, which the Living Age for October 13 re-prints from the Fortnightly Reviexc, is a stuking and sympathetic study of the career of Booker Washington, which, although written primarily for English readers, will be read with keen interest in this country.

The November Delineator treats of the established styles for autumn both in dress and millinery, and also devotes much space to the accessorics of dress which women find so alluring. The three serial stories continue to hold the interest displayed in them from the start. Lida A. Churchill, in her Department of Real Life, discourses on Playing to the Upper Audience, Gcorge William Jordan gives good advice for When We are Face to Face with Troulle, and the fourth paper of Little Problems of Married Life treats of Making Marriage a Success.
From the Canadian Magazine for October: One hundred thousand immigrants in a single year was a good record. That was in 1905. The tale for 1906 is thirty-one thousand greater. To be striotly accurate the figures are 102,723 and 135,268 . But were they as good, as desirable? This question is as easily and as favourably answered by the figures. The number from England increased by 16,288; from Scotland hy 4,102; from Ireland by 1,020; from Wales by 27 and from the United States by 14,253 . The continental increase was only 7,108 . Therefore the class of immigrants improved. It is interesting to note that of the 131,000 immigrants, 78,106 were men, and 27,273 were women. The Canadian girl will have plenty of ehoice when it comes to the matter of a husband. Fifty-one thousand men without wives should seriously increase the competition.
The Atlantic Month'y for November is distinguished by the variety and excellence of its contents. © The Ideal Lawyer, by Hon. Judge Brewer, is written by a leader of the bar who is now associate judge of the United States Supreme Court, some unpublished correspondence by David Garrick, by Professor Grorge P. Baker, a foremost authority on some aspects of the English drama; and there are other notalite essays with stories and poems, making an interesting numher.

Acadicnsis for October, D. Russell Jack, St. John, N. B., editor, completes an article on the union of the Maritime Provinces, by Regiuald V. Harris. Its array of arguments and facts are carefully made and suggestive. Other noteworthy articles in this number are, Dr. Stockton's "Judges of New Brunswick and their Times," "Major Ferguson's Riflemen," by Jonas llowe, and "Major 'Thomas Hill," by D. Russell Jack.

## Isaac Pitman's

Short Course in Shorthand, just published after three years preparation, "Revolutlonizes the Teaching of Shorthand." Only forty (40) lessons.
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EDucational Review $\mathfrak{m u p p l e m e n t}$, December, 1906.


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Addresa all correapondence to
THE EDUCATIONAL REVIEW
Sr. John, N. B.

[^22]A Happy Christmas and New Year to all the readers of the Review! May it be a season of great joy to teachers and pupils alike. Christmas is the birthday of the world's greatest teacher. It is the Christ-child, such a one as our picture represents this month, that appeals to children. In all the joyousness of the season, in the giving and receiving presents, in all Christmas exercises, let the children constantly feel that Christ is the best gift of all. It was He who took children up in His arms and blessed them; who said, "Of such is the Kingdom of Heaven." How this gift surpasses every other! Let this thought pervade the Christmas spirit.

Children liked to be loved and remembered at this time, and the teacher can make the schoolroom a bright and happy place, directing the Christmas spirit so that it shall reach parents who are indifferent to the needs and wishes of children, enter homes where poverty is always present, and also homes where the abundance of gifts make children indifferent to the real meaning of the season and indifferent to the needs of poorer children. The teacher can help rich and poor alike to share in the large bounty of love and good-will.

Read the "Busincss Notice" on another page.
Mr. Mattinews' article in this number is an excellent introduction to geometry in the lower grades.

Chief Surerintendent Dr. J. R. Inch announces on another page that a new Drawing book has been authorized for New Brunswick schools, and also outlines the manual training courses for teachers for the next term.

Tue Natural History Society of New Brunswick has recently moved its collections and library into a commodious building, opposite the high school, St. Joln. This live and useful society will now have the opportunity of doing much more effective work in displaying its valuable collections.

The House of, Lords has made so many drastic amendments to the British' Education Bill that the Government has decided not to accept them. This means. that the Lords will probably yield, and pass the bill in something near the form it went through the House of Commons.

Seattle is to have the next "World's Fair," in 1909, to be known as the Alaska-Yukon-Pacific Exposition. The site comprises 255 acres of the campus of the Washington University of that city, and the substantial buildings to be erected will remain as the property of the university, to be used for educational purposes after the fair closes.

Dr. J. Fletcher, Dominion Entomologist and Botanist, publishes in the last number of the Ottawa Naturalist a valuable contribution on School Exhibits of Pressed Plants. He points out that the proper selection and pressing of plants is an educational exercise of much importance, teaching patience, judgment, interest in and knowledge of one's surroundings. This is one of a series on Nature-study-now numbering thirty-eight-which embraces many excellent articles by Canadian naturalists.

The next session of the Summer School of Science will be held at Riverside, Albert County, from July 2 to 19. Teachers and other students should early form their plans to take one or more courses, preferably one. The Secretary's announcement will be found on another page. If the teacher who has resolved to attend will lay out a course during the approaching vacation, and devote all the spare time possible to read and study for it, much can be accomplished during the session. The fine scenery, especially in the neighborhood of Riverside, and the varied resources of Albert County, will furnish a great object lesson to students.
"How to deal with the bad boy" is a perplexing question to those who have bad boys brought to them, charged with misdemeanours. Perhaps a note from Judge Lindsey, who has had much success in dealing with this problem in the West, may be of service:

Five boys under fourtecu committed an aftermidnight burglary. Julge Lindsey talked with them for more than half an hour. It was not a lawyer's talk, nor a schorlmaster's, just chummy. He was nearly through before his purpose was ap-
parent. Then he said to No. I: "You are weak. It would be as easy for you to be good as bad if anybody would lead you. You come to my party for weak boys on--." To Nos. 2, 3 and 4: "You have weak streaks, but you are forming habits of strength along bad lines. I must see you at four o'clock Monday." To No. 5: "You are wicked, very wicked; you have gotten all these fellows into trouble," and then he took him in hand.

## The Madonna of the Chair.

The subject of the Review's Christmas picture is the Madonna of the Chair, by Raphael. The Italian word Madonna, in old times used in addressing a lady, is now applied almost wholly to the Virgin Mary. The Madonna of the Chair represents the Virgin seated, holding her child on her knee and encircling him with her arms. By her side is the young Joln the Baptist, his hands clasped in prayer, and holding a cross, as if to herald the death of our Saviour. ,While the mother and child look at us out of the picture, his gaze is fixed in adoration upon the infant Saviour.

An old legend about this picture relates that Raphael, having come sudderly upon a beautiful family group, took them as a model, and sketched the figures rapidly upon the head of a cask, thus accounting for the circular form of the picture. The composition is marked by the exquisite beauty of the faces-the mother's head laid tenderly against ${ }^{\text { }}$ that of the child looks at us with the peaceful, happy look of a mother. The rounded face and chubby limbs of the child denote perfect health, and in this he is like other healthy children; but in his large eyes there is an earnest, even grand, expression which painters always sought to give to the child Jesus to mark the difference between liim and the ordinary children.

If one studies the picture carefully, it will be seen how curved and rounded are all the lines within the circle. The harmony of the lines thus make a perfect expression of the peaceful group, whose centre is the infant Saviour; and whether the legend above. has any foundation or not, the lome-like scene impresses us with its beauty and tenderness. Note the circles of light around the heads, used by painters to denote holy persons.

The mother wears a handkerchief of many colours over her shoulders, and another on her head.
'The picture is suggestive of the happy Christmas season, when the eyes of the Christian world are centred upon Christ and upon home.

## How One Teacher Uses the Pictures.

The following letter from Miss E. Rogers, principal of the Girls' High School, New Westminster, B. C., shows what may be done to decorate a schoolroom and at the same time be a means of discipline:
"May I tell you how I have made some of the pictures that come with the Review useful? Every montlo that I have no tardiness to record I give the school a framed picture as a prize. For this purpose many of these pictures are admirably adapted. Our walls are now made attractive with pictures, and tardiness in my division is almost nuknown. Although the framing of the pictures is a little expensive, I have been repaid by the punctuality and increased interest among the pupils."

We would like to hear from others who are using these pictures. The cost in production and extra postage each month is considerable, but that would be cheerfully borne if we knew that the schoolrooms are being brightened by their influence, and that the interest of the scholars is being newly awakened to their work, and that they are making the beginnings in the study of art.

The framing of the pictures need not necessarily be very expensive. In the December, 1905, Review Mr. T. B. Kidner gave some very excellent drawings and suggestions, which, if followed out, would be a certain stimulus to manual work, and at the same time give the pictures a greater valuc, because the work could be done by the scholars themselves under the teacher's direction.

## An Advisory Board.

During the late session of the Nova Scotia legislature a change was made in the Education Act, providing for the appointment of an advisory board. Its duties are simply to advise the Council of Public Instruction and the Superintendent of Education in regard to school books and apparatus; qualifications and examination of teachers; courses of study for the public school and the standard for admission to the county academies and high schools; the classification, organization and discipline of the normal school, county academies and the public schools; and other educational matters as may from time to time be referred to them by the superintendent or the council.

The appointment of this board has been completed, and their names will be found on another page. Five members of the board are engaged in educational work in the province, and their names are a sufficient guarantee of the wisclom of the choice. The two others, Messrs. Cameron and Donkin, are practical business men and leaders of
industry. The advice and assistance of such a board of experts cannot fail to add considerable weight to the educational councils of the province.

## Kindness to Animals.

The minister of the interior of the government of Holland has sent out a circular to the heads of all schools in that country asking them to co-operate with the government in a movement to protect animals and birds. He wishes it to be impressed upon the minds of school children that it is mean and cowardly to be cruel to animals. To comply with the minister's request school principals and inspectors are holding conferences with all classes of teachers as to the best method of accomplisling the desired end. Laws are also in preparation to punish more stringently than heretofore all who are guilty of cruelty to animals.

The minister ordered large colored plates of the useful birds and of the insects they destroy to be distributed throughout the country with pamphlets showing the value of the birds in agriculture and forestry. It is explained how impossible it is for man to cope with the minute insects that prey on plant life, and that only the birds can save many valuable trees and much vegetation from destruc-tion.-American Primary Teacher.

## First Grade Number Games.

Ten or fifteen are the highest numbers that children in the first grade should work with. Simple counting games and games in adding and subtracting may be used with good results.

One very good plan is to take the nursery rhymes and fables that are familiar to nearly every child, and have them enacted by the children, bringmg in, if possible, practice in counting. One of the rhymes which may be used in such a way is the one beginning " one, two-button your shoe; three, four -shut the door," etc. Have the children go through every motion indicated by the phrases. It will not take long for them to learn to count rapidly.

A simple game for practice in addition is this: A child may group as many as ten or fifteen children in two's, three's, onc's, four's, etc. The object is for another child to add then11 by groups, giving results only as he goes along. For example, if the groups are in this order: three-two-four-onethree: the pupil adds this way, "three, five, nine, 10, 13. ." This is merely a suggestion, for the idea may he carried out in several ways.-School Education.

## Our Climate.

Professor L. W. Batley, LL. D.
The climate of a country is one of its most distinctive features, and, though we may at first fail to fully recognize the fact, is intimately associated with its entire history and development. Thus, climate necessarily controls, in a large degree, the natural products of the country, whether of the field or forest ; it involves the conditions of temperature, both as regards the average and the extremes, and therefore the fitness of the region for human habitation and for the purposes of husbandry. It includes also the conditions of humidity, and is hence intimately connected with both the amount of rain-fall and its distribution. Through the latter it determines also the nature and distribution of plants and animals. It affects, favourably or otherwise, the physical and mental development of a people, and determines, to a large extent, the direction in which the efforts of the latter are to be employed.

The climate of Acadia is well worth some consideration, and is the result of the combined influence of many factors, which may be separately noted.

Of first importance, of course, is our geographical position. This, between the parallels of $44^{\circ}$ and $46^{\circ}$ north latitude; determines our relations to the sun, the obliquity of the latter's rays, the length of day and night, and the relations of our seasons. Our longest day (June 21) is one of about sixteen hours, our shortest (December 21) less than nine hours. Our seasons may be roughly divided into two of equal length-a cold season from November to May and a warm one from May to November. This corresponds to periods of general frost and its general absence, though such frost may, and often does, occur within any month of the year, The extremes of temperature are $100^{\circ}$ Fahr., though rarely attained, and $-40^{\circ}$, also of infrequent occurrence. Even when the days are hot, the nights are generally cool, and, especially during the winter season, great changes, in some instances amounting to $90^{\circ}$, may occur within twenty-four hours. These latter are usually the accompaniment of cyclonic storms, which will presently be more particularly considered.

A second element in our climate is that of humidity. No portion of New Brunswick is very far from the sea, and probably every part feels its influence. Of course this is especially felt directly upon the sea-board, where the excess of moisture is
so frequently emphasized by the prevalence of fogs. These are the direct result of the chilling influence of the coastal waters, a portion of the Arctic current coming down from Baffin's Bay, upon the moistureladen winds blowing inward from the Gulf stream, and are almost sure to develop whenever southeasterly winds are prevalent. Their effects are to be seen in a marked reduction of temperature, giving to St. John and other points upon the coast a delightful coolness at a time when the inhabitants of the Atlantic cities farther south are sweltering beneath the scorching rays of the mid-summer sum. They also, but in a different way, tend to soften the severities of the winter season upon the coast, determining not only a more open fall and earlier spring, but a much warmer average winter temperature, with less marked extremes, than is to be found in the interior.

But that interior is also affected by the fact that it is nowhere very distant from the coast. Sea fogs, it is true, do not penetrate far inland, being confined to the immediate sea-board by the ranges of hills which lie along and parallel to the latter; but the winds are not thus stopped; and, as they blow northward, or, in the case of the Gulf shore, to the westward, they carry the moisture with them, even though no longer visible, and it is this moisture which is the source of supply for all our rivers, streams and lakes. It is this which makes New Brunswick such a well watered country, and which, indirectly, has had so much to do in determining the development and the occupations of its inhabitants. Indirectly, it determines the depth of our snows in winter (an average of about five feet in the forested portions when at its maximum), the alternations of flood and low water as the seasons succeed each other, together with the character and distribution of our native plants, the abundance of springs and many other important consequences.

A third determining factor in our climate is the irregularity of its surface features. Variations of altitude correspond in a general way to differences of latitude, and though no portion of Acadia can properly be called mountainous, there is sufficient difference of level to make quite noticeable a difference of temperatures in different places, as regards both the daily and seasonal variations, and the determination of extremes. These differences are reflected in both the character and course of vegetation about St. Joln. Spring flowers are to be gathered on the southern coast nearly a fortnight earlier than in the interior at Fredericton, the range
of the Nercpis hills confining the influence of the sea-board to their southern side, while later in the season the clear skies and consequent greater warmth of the tract morth of these same hills, stimulating plants to more rapid growth, cnable them not only to make up for what time has been lost, but to continue to advance with much greater rapidity. Travellers by rail from Fredericton to St. John in the mid-summer months often pass in a little over two hours from a temperature of $98^{\circ}$ to one of $50^{\circ}$ or less, and the drop is distinctly, and sometimes quite suddenly felt in passing from one side to the other of the Nerepis hills. So, in the opposite direction, greater extremes characterize the climate of Woodstock than that of Fredericton, and of Edmundston as compared with Woodstock. The summer season also grows shorter as we go northward, though this, no doubt, is partly due to increase of latitude. Upon the highlands of Northern New Brunswick remarkable variations are also to be noticed in the temperatures of day and night, the heat at mid-day being such as to be almost unbearable, with the hot air actually quivering above the heated surface of rocky ledges, while the temperature at night may be not far above the freezing point.

Finally, the direction and character of the zinds have much to do in determining the nature of the climate as regards both Acadia as a whole, and of one part as compared with another. It would not be in place, nor have we space to discuss here at length, the complicated subject of atmospheric circulation, (for this the reader must consult some one of the several admirable text-books of Plysical Geography, such as Davis, Tarr, Dryer or others, published within the last few ycars), but the main facts are briefly thesc. Air, as a highly attennated fluid, is easily moved. It is also easily heated or cooled, partly by the direct action of the sun, but to a much greater extent by the surface on which it rests. Land surfaces, especially in summer, heat the air above them, while that resting on water surfaces is relatively cool. Heating of the air, by whatcver means, makes it lighter by expansion, while cooling makes it, by condensation, relatively heavier.

Hence, warm air tends to rise, producing diminished pressure in the heated area, while cold and heavy air, with greater weight, produces increased pressure. Hence, a movement of the air, a wind or current, from the area of greatest to that of least pressure. It is ly means of observations made on these variations of pressure, by means of the
barometer, that it becomes possible, as in the daily forecasts of the weather, to determine the origination and path of storms. By telegraphic reports received from every part of the continent, the officers of the meteorological bureau are able to parcel out the surface of the continent into areas of high and low pressure, and to issue daily weather maps exhibiting the latter. The movements in the position of these areas are also subject to certain definite laws which cannot be discussed here. The areas are commonly known as cyclonic and anticyclonic areas, as a recognition of the fact that, in addition to some general forward movement, there is also in each case something of a circular or spiral movement similar to that which is developed about the outlet of a bath-tub in the escaping water, or in the smoke discharged from a tobacco pipe or locomotive. In an anticylonic area the air, slowly descending from aloft, moves from a centre outwards in all directions, that centre being one of low but rising temperature and increased pressurc. Any moisture present in the air is taken up, the sky remains clear, and, as dry air is heavier than damp air, it presses harder on the mercury of the barometer, and this rises accordingly. On the contrary, in the region traversed by a cyclone, the air moves inwards to a centre of relatively warm temperature, but diminished pressure. The air, saturated with moisture, becomes lighter and rises. Clouds and rain are detcrmined, and the barometer falls. Finally, cyclonic and anticyclonic areas, or areas of low and high pressure, follow each other across the continent along approximately definite paths, either coming up the coast or crossing the region of the Great Lakes and passing out to sea. In North America the direction of the movement in the whirl, as a whole, is from west to east, following the dircction of the hands of a watch. This explains a very common error. We commonly regard our storms as coming from the cast; in reality they come from the west. The reason for this is readily understood. While the whirl, as a whole, is moving eastward, the casterly side will be the first to be felt, and here the flow, being towards the centre, will be from east to west, bringing with it the moisture from the ocean; but as the whirl passes on we soon experience the effect of the opposite side which is also moving towards the centre. Thus while the area, as a whole, moves eastward, we experichice first a flow from the east with fog and rain, followed later loy a sudden change to a flow from the opposite side, with strong northwest winds and a clearing atmosphcre. Such movements,
finally, may be slow and gentle, or they may be rapid and violent, determining storms. These latter rarely attain, in the Maritime Provinces, the magnitude of western or tropical cyclones, even in the winter, but "blizzards" are by no means unknown, and occasionally we have, over limited areas, and as the result of local conditions, storms which, in intensity and destructiveness, may well compare with those of less favoured regions. Thus, in the month of October, 1869, there occurred what was long known as the Saxby gale, occasioning a large amount of loss, especially in the forest lands and along the coast, in the former instances prostrating great numbers of trees along narrow, parallel bands, and on the latter, through the accompaniment of an extraordinary tidal wave, flooding the marsh lands of Albert and Westmorland counties. Somewhat later a storm of similar violence, but more local in area, was witnessed by the writer in the vicinity of St. Leonard's, Madawaska, when, in the course of a few minutes, nearly all the houses in a little French village were unroofed. A similar result occurred in the case of a storm which, not many years ago, passed over the settlement of " the Barony," in York County.

The foregoing remarks and illustrations have had to do almost exclusively with New Brunswick. In Nova Scotia the conditions are essentially similar, but modified by its more insular character and lower reliefs. Fogs reach almost every portion of the peninsula and characterize the coast even to a greater degrce than in New Brunswick, statistics showing for a summer mean of two years (I864 and 1865) 6.7 foggy days for Halifax as against 5.3 for St. John, while the average number of rainy days was for the former 15.75 , while that of the latter was only 7.8. The mean summer temperature of Halifax, as given in the Canadian Year Book for 1868 was 6o.8, that of St. John 58.1.

The influence of barriers to atmospheric flow is well illustrated in the case of the North Mountains, and is alluded to by Longfellow in describing the village of Grand Pre,-
"Away to the northward
Blomidon rose, and the forests old, and aloft on the mountains
Sea-fogs pitched their tents, and mists from the mighty Atlantic
Looked on the happy valley, but neer from their station descended."
It is this ferture, combined with that of its soils (a subject to be discu.sed in a later chapter) which has made the Amapolis and Comwallis vallevs the " Garden of Nova Scotia."

## Geometrical Drawing.

F. G. Matthews, Truro, N. S.

Principal Maedonald Manual iraining School.
This and the following articles have been prepared at the request of the Editor, with a view to assisting teachers to introduce geometrical drawing in Grades V, VI, VII and VIII of the common schools. The object in so doing is not only to give the pupils practice in mechanical drawing, which of itself is of great educational value, but to form an introduction to the study of geoinetry. Facts or principles learned through doing are likely to remain much longer in the memory than those obtained through reading. The pupil will, therefore, as a result, on commencing to study geometry, find the work very much simplified.

A number of exercises have been arranged for each grade, containing sufficient principles to cover a year's work. The accompanying sheet shows those intended for Grade V. The method of construction is briefly stated for the benefit of the teacher; but the teacher should, in teaching the principle of an exercise, apply it practically by making up some interesting little problem in plotting out or designing. This is most important, for, if taught otherwise, the object of the lesson will be beyond the child's comprehension, and therefore lost. The few examples given after the exercises will show what is meant, and the earnest teacher will find endless material in the schoolroom, playground or garden on which to base other problems. It will be seen that many of them can be given to the children in something of the form of puzzles, which, as we all know, have a great fascination for children. This feature makes the subject one of the easiest and most interesting to teach.
The methods of using the ruler, set squares and pencil have been fully explained in a former series of articles dealing with "Drawing in the Lower Grades," (Nos. 2II to 217, December, 1904, to June, 1905). The only new instrument introduced at this stage is the compass, which the children should be taught to use properly from the first. In drawing circles, no part of the fingers should touch either leg of the instrument, but the small, straight piece above the hinge should be held lightly between the thumb and first finger. When taking off measurements, both hands may be used, as with divides.

Great care should be taken with the drawing, given lines and resultants being drawn with firm black lines, while working lines should be subdued as much as possible. These can then, if necessary, be cleaned out afterwards.

All new terms, such as radius, arc, circumference, degrecs, segment, etc., should be carefully explained, and simple definitions given as new figures are introduced, but no attempt should be made to prove the truth of any problem, except by optical demonstration, until commoncing to study theoretical geometry.

Fig. I. To bisect a straight line.-Place the point of the compass on A , and with any radius more than half of the line, describe an arc. With B as centre and the same radius, describe another arc. Join the points of intersection C and D by a straight line cutting AB in E . Then E is the middle point of $A B$.

Sample exercise on above. The line $\mathrm{A} \quad \mathrm{B}$ represents a form to hold four children. Mark off an equal space for each child. (Bisect the line, then bisect cach half).

Fig. 2. To bisect all are or regular curve.-The same construction as in Fig. I.

Sample exercise: The curve $A B$ is the arch at the top of a door or window: Find the centre point from which to hang an ornament.

Fig. 3. To bisect a straight line by means of set squares.-Place a ruler under the given line, and rest a set square on it with one acute angle at A ( $30^{\circ}$ is the most convenient). Draw the line AC. Keverse the set squàre, and with angle at B draw the line DB. Place the ruler above the line and with set square beneath, similarly draw AF and EB. Join GH. I is the middle point of the line.

Fig. 4. To draw a straight line at right angles to a given straight line, from a point at or near the middle of the given line.-With O as centre, and any convenient radius, mark off $C$ and 1 ) equidistant from it. From C and D) as centres, and radius greater than CO , describe ares intersecting at E . Join EO, which will be at right angles to AB.

Sample excreise: 'The line Al'; represents a level piece of ground. At the point $O$ we wish to erect an upright line for a flag pole.

Fig. 5. The same as Fig. 4, but from a point at or near the end of the line. With the given point $O$ as centre, describe on are nearly a semicircle. From C, and with the same radius, mark off I) $\left(60^{\circ}\right)$. From 1), with the same radius, mark off E (another $60^{\circ}$ ). Bisect DE (as in Fig. 2) by ares at F . Join FO, which will form the right angle with $A B$.
Fig. 6. The same as Fig. 4 (Builders' method). -Let $A B$ be the given line and 1 ; the given point. Divide $A B$ into four equal parts, and produce AP
to C , making BC equal to one part. With B as centre and 3 parts as radius, describe an arc. With A as centre and 5 parts (AC) as radius, describe another arc intersecting at D. Join DB, which is the required line.

Sample exercise: AB is the front or street line of a house. Draw the side DB to be perfectly square with it.

Fig. 7. The same as Fig. 4, from a point over, or nearly over, the centre.-Let AB be the given line and $O$ the given point. With $O$ as centre and any radius long enough to cut the line, draw the arc cutting $A B$ in $C$ and $D$. With $C$ and $D$ as centres, draw arcs cutting at E . Join OE cutting $A B$ in $F$. Then $O F$ is at right angles to $A B$.

Fig. 8. The same as Fig. 4, from a point over, or nearly over, the end of the line.-Let AB be the given line and $O$ the given point. From $O$ draw any line OC towards A. Bisect OA in D. With D as centre and radius DO , describe a semicircle cutting $A B$ in $E$. Join OE. Then OE is at right angles to AB.

Exercise: By drawing the sellicircle in various positions the children may be shown that the angle in it is always a right angle, by applying the $90^{\circ}$ angle of the set square. No further proof is required at this stage.

Fig. 9. The same as Fig 8. Another method.With $A$ as centre and radius AO , describe arc OC. With $B$ as centre and radius BO, describe arc OEC. Join OC, cutting AB' in D. Then OD is at right angles to AB .

Fig. Io. The same as Fig. 9. Point beyond the cud of $A B$.

Construction the same as lig. 9 .
Fig. in. To drazu a straight line parallel to a gizen straight line at a given distance from it.Let Al; be the given line and C the given distance. Take any points near the ends of the line, and with radius equal to C , draw the arcs D and E . Join across the tops of the two arcs. Then DIE is parallel to Al3.

Exercise: Draw two straight lines three inches long and two inches apart. Between them draw two other lines, so that the four shall be equidistant and parallel.

Fig. 12. To draxi a straight line parallel to a sizen straight line und through a gizen point.Let $A B$ be the given line and $O$ the given point. With $O$ as centre and any radius reaching nearly to B draw are (D). With ('as centre and the same radius draw arc OE. Measure OE with compass

GEOMETRICAL DRAWING GRADLV.
(
and mark off $C D$ equal to it. Join OD. Then OD is parallel to AB .

Exercise : $A B$ represents the edge of a grass plot. I wish to set off another parallel to it commencing from O .

Fig. 13. To describe a circle with a given radius. -From any point $O$ with radius equal to E , describe the circle.

A good exercise at this stage is to start witl a circle of about $11 / 4$ inches radius, and draw a series of concentric circles, lessening the radius by $1 / 4$ inch each time. The smaller they get, the more difficult to get a good even line.

Fig. I4. To describe a square on a given straight line.-Let AB be the given line. At A construct a right angle $B A C$ cutting off $A C$ equal to $A B$. With $B$ and $C$ as centres and radius $A B$, describe arcs cutting at D. Join CD and BD . ABCD is the required square.

Exercise: Demonstrate with set square that all the angles are right angles, and with compass that all sides are equal, and educe an casy definition.

Fig. 15. The same as Fig. 14. With set squares. -Place the ruler under A13, and with set squares draw right angles at $A$ and 13. Mark off $C$ and 1) equal to AB and join.

Exercise: Join $A D$ and BC. Measure them with compass. If correctly drawn, they will be equal.

Fig. 16. To inscribe a square in a gizen circle. -Draw any diameter AB. At centre O erect perpendicular cutting circumference in C and D . Join $\mathrm{AC}, \mathrm{CB}, \mathrm{BD}$ and DA , which gives required square.

Exercise: $O$ is the point in the middle of a garden. Lay out a square plot so that the corners shall all be equidistant from O .

Fig. 17. To construct an oblong. Length of sides given.-Let AB and C be the given sides. At A and B erect perpendiculars, making AD and BE each equal to C . Join DE, or follow the same construction as Fig. I4.

Fig. 18. To inscribe a regular heragon in a given circle.-From any point A on the circumference, step off $\mathrm{AB}, \mathrm{BC}, \mathrm{CD}, \mathrm{DE}, \mathrm{EF}$ and FA all equal to the radius of the circle. Join the points with straight lines.

Exercises: 1. Make a six-pointed star. (Mark off points as above, and join alternate points AE , $\mathrm{EC}, \mathrm{CA}, \mathrm{BF}, \mathrm{FD}$ and DB ).
2. Draw a circle with six lenses.

Fig. 19. Construct a hexagon on a given base. -Let $A B$ be the given base. With A as centre and AB as radius, describe arc BOC . With
$B$ as centre and same radius, describe arc AOD. With $O$ as centre and same radius, describe arc CEFD. Cut off CE and DF each equal to AB . Join BD, DF, FE, EC and CA.

Fic. 20. The same as Fig. 19. Set square methorl.-Place ruler under AB. With set square on ruler, $60^{\circ}$ angle at A, draw AF. Slide set square to B and draw BC . Reverse set square and draw $B E$ and $A D$. Draw verticals at $A$ and $B$, cutting slanting lines at E and F . With $60^{\circ}$ angle draw lines back from E to D and F to C .

The remaining dotted lines show the various positions of the set square.

## Sunshine in the Shadows.

"Our idea laas been to carry the good cheer into the home," writes Mand Ballington Booth in the December Dclincator. "Christmas is pre-eminently a home festival. It may be good, under some eircumstances, to call the poor to a great dinner, and undoubtedly much jor has been given to little ones by the decking of the Christmas tree, but so far as our effort is concerned, we feel that we can do the most by bringing hrightness into destitute lomes. However good the dimner, it is forgotten in the hunger of to-morrow: and the bright festival around the Christmas tree makes the fireless home the more dreary when the little ones return to it. This thought has promnted we to snend our Christmas funds in sending food, fuel, clothing and tovs into the loome and adding all the comforts possible to these cheerless lives, not only on that one dav. but during the winter season. The oranges and toys, the Christmas stocking and the turkey, together with a good supply of coal with which to cook it, mean warmth to the chilly garret and will gladden the children's Christmas day. but what a comfort during the remaining winter davs will be the warnt overcoat and good strong shoes to the little ones who had before to shiver to sehool in broken shoes and thin cotton garments.
"Thousands of families are helped by the Salvation Army Volunteers in our big cities, and while they are thus caring for the manv poor. I have undertaken in my special work the playing of 'Santa Clans's Partner' to the destitute families of the men in prison. In our Volunteer Prison Department we have chronicled the names and ages of all the little ones who are registered in our Christmas book, and it takes us a whole month to prepare for the eventful day. With the money generonsly sent in from manv sources. I bur several thousand dollars' worth of warm garments. Last Christmas we lised seventr-five dozen pairs of chillren's stockings. To all those families at a distance we send the Christmas boxes carefully packed, but to those in New York City we deliver personally frons our express wagon on Christmas Eve the gifts that are to gladden the little ones,"

## Visualization.

Mrs. Catherine M. Condon.

Visualization has been defined as the local memory of the eye, although it really includes much more. The ability to make a volmary and sustained use of this power-visualization-lies at the very formdation of a progressive intellectual life, and is indispensable to the artist. Like every other mental endowment, it varies, both in kind and degree, in 'different individuals. Some, for example, never forget a face once seen, whether it be the beloved features of a departed friend, or the living face itself, which is instantly recognized after, it may be, years of absence. A swift comparison is made between the object presented to the senses and the mental image stored up, and perhaps long dormant; the visualized image, in a flash, is compared with the friend's face and form. and this results in recognition. The process is as swift as it is subtle. But the recognition of all object presented to the sight is the simplest manifestation of this power, although it is not so simple as may at first appear. A child sometimes sees an object many times before he recognizes it at once, and with certainty, from the mental image - the product of visualization. How vaguc and defective the first visualized images in the mind of a child must be, may be gathered from the crude pictorial representations made by children. After making duc and large allowance for the want of manual skill, lack of facility in the use of language, and general inability to express ideas, one is still surprised to find how bhurred and incomplete mental vision is, not only in the child. but even in persons you would judge to be capable of visualizing. recognizing and reproducing, in some one or other of the expressive arts, their mental images with clearness and precision. The mere instinctive and untrained use of visualization is very deceptive. and, by consequence, largely inoperative as an educational force.

Take the child who drew a mouse on his slate, for example: a circular motion of the pencil gave the cye. a straggling line the tail, and there you have the picture of the mouse: and what is so strange and thought-compelling is, that the child was satisfied with the crude production. It may well be that the glancing eve and tense. long-drawn tail were about all that impressed themselves on the child's brain. for however awkwardly draw the other parts of the mouse might have been. had they been Irawn at all. they could not have heen repre-
sented without having left some trace on the mental retina.

Take now an example of splendid visualization in Turner, the famous painter, in his wonderful picture, "A great storm from a railway carriage." The incident was related by a young lady who was in the same carriage with the painter and his friend. The storm was, a fearful one. Turner, who had been watching it, asked permission of the lady to open the window and to look out, so as to have a larger view of the storm. After gazing with great intensity on the tempest, by which the very heavens seemed gashed and rént asunder by the lightning flashes that were almost continuous, he drew in his head and slunt the window, after allowing the lady, also at her urgent request, a brief survey, for it was now raining in torrents, then sat down, and, leaning back in his seat, closed his eyes for some time. What was he doing? He was, by an intense, conscious and combined effort of the intellect and will, reproducing the whole scene, and fixing it so vividly and so ineffaceably that it was possible for him to review it at pleasure : and from the storedlup mental image his marvelous sikll as an artist enabled him to give the splendid vision in concrete form for the delight of others-a supreme result of the trained power of visualization.

This power of visualization exists in kind, although differing in degree, in every one; but in the artist, poet, and in writers of marked descriptive ability, it is present in large measure, so that the reader is forced to see the picture as presented.

Who, in reading "The Ancient Mariner," has not felt the power of that cold, compelling eye that arrested and held the unwilling wedding-guest? And how plainly Goethe makes us see, scene after scene. in which Mephistopheles. Faust and Margaret figure.

To him who has raised visualization from the merely instinctive and casual to an art, practised at will. the life of the intellect is rich and glowing with vivid conceptions. Great inventions stand out, clear as crystal, in the inventor's mind long before they are fixed in material form. and things that are not are to him as though they were.

Now how shall we develop this amazing power of the human mind in our children so that it may be of real service in the practical business of life? How, in Freebel's words. shall we enable the child to make the ontward, inward. and the inward, outward? How begin the process. keep it up. and render it cumulative? The retina receives the
image instinctively, but unless the object be observed, no clear abiding impression is left on the brain. It is bad enough to lose even one single impression of value. We will deal here with the child in the primary school. The teacher must understand that, in too many cases, he will have to do work that should have been the business of the nursery. Speech, the first of the expressive arts, must be clear, articulate and have definite meaning; this involves careful looking at some definite object of interest to the child, say a cat. Ask those who have a cat of their own to say so; select some of the brightest to tell all they have observed about their cat; then select a dull child, draw out what he knows. and delicately help him to express his struggling notions in words plainly spoken. Be helpful to his halting, incoherent speech. Let him feel the faint stirrings of his own mind, no matter how dull and fceble they may be, and let him express them in speech, evell if, at first, he only repeats after you. a little, easy sentence that you have framed. Remember, the first intelligent efforts of the child are purely imitative, and must be helped. Do not be afraid of asking questions that are too simple, for you have before you a rather complex problem, viz., carcful obscrvation to secure future recognition of the object, the forming of a clear image in the untrained mind, and the representation, in concrete form. of a concept in the young mind. The natural. and therefore the easiest method of expression, is by means of audible speech.

Ask questions about the cat's legs, its tail, how it differs from that of a dog, or a horse. or a pig: about its paws and claws. and what effect the iember of a cat has upon them; on the lay of the fur. whether it is kind to rub nussy un the wrong wav: whether they are not vexed if their faces are rubbed un carelessly when they themselves are washed in the morning.

Now for visualizing: tell them to shut their eves and try to see a fine black cat. Watch the little faces and wou will observe striking differences in expression. Some will visualize the black cat so vividly that thev will langh right out with delight. Take mains to find out how much of the black cat thev realls see: others will have no mental vision of the black cat. or. indeed, of anv other cat. These have been neglected and must be helned with natient kindness. Find out some obiect that thev know well: let them talk about it till thev are full of interest : then get them to shut their cyes and try to see it. If they can see it, let them describe it,
and help then to clear up any vague or incorrect impressions.

This exercise must not be kept up too long, or the tender brain may be unduly strained. Put a rough sketch of a cat on the board, without one unnecessary stroke, and let them draw it on their slates; it will not amount to much as drawing, but it will help them to a clearer mental image. Then write in plain script the word cat, and let them see it is a symbol so easily and quickly made. If you set about this in earnest. and succeed in interesting the children, you will have at least given them the power of calling up one clear mental image; the desire to make a representation (rough, it must be granted) of what appeals to them, in "the universal language of the eye," and also the power of expressing the idea in language more or less fitting, and later on in forms more or less artistic. This is but a small and feeble beginning in the art of conscious and zoluntary visualization, but it is a begiming on sound principles suited to the mind of the child. Those principles may be applied to cevery subject at every stage of progress ; the result will be to gain the power and habit of correct and vigorous thought.

## A Lesson in Deceit.

Slue is the daughter of a grammar school principal in Colorado Springs. Her first day in school she whispered and was kept after school. The same on the second day. The third, the same. The fourth day she came home on time. No after school that day. She was beaming with delight. * Oh. mamma, I've learned how to to it. Alt I have to do is to whisper when teacher's lack is turned."
" Three knots an hour isn't such bad time for a clergyman," smilingly said the minister to himself, just after he had united the third couple.

The publishers of Webster's International Dictionary have just issucd a handsome thirty-two page booklet on the use of the dictionary. Sherwin Cody. well known as a writer and authority on Englislo grammar and composit:on, is the author. The booklet contains seven lessons for serstematically acquiring the dietionary habit. While it is primarily intended for teachers and school principals. the general reader will find much of interest and value. A copy will be sent. gratis. to anyone who addresses the firm. (r. \& C. Merrian Company, Springfield, Mass.

Some Criticisms of Our Methods of Teaching.

By Principal Chas. D. Richards, A. B.<br>[Read before the York County Teachers' Institute, Fredericton, October [1, 1906.]

One of the striking characteristics of present-day Canadian sentiment and Canadian expression is that of self-gratulation upon the wonderful aclvancement which we are making in all the various phases of life. This is especially noticeable in respect to our commercial and industrial activity. It is a favourite theme of writers and speakers, and cverywhere it tonches a responsive chord in the spirits of all loyal Canadians.

Co-existent with this commercial and inchtstrial progress there is also an intellectual advancement, which, while receiving less general pulblic attention. may be considered with an equal measure of pricle and gratification.

We, as teachers and as a part of the educational life of New Brunswick, may reasonably claim that we are not behind in this general advancement. The schools of to-day are so far ahead of those of a quarter of a century ago that even the most blind and stubborn of our chronic grmmblers cannot but admit their superiority.

But while thiss in a broad and general sense we easily perceive a marked improvenent, it is not fitting that we should calmly fold our arms, and, with pharisaical complacency, flatter ourselves that there is no further need of, or opportunity for, improvement. Because, on the whole, our schools are better to-day than twenty-five years ago, it does not follow that in all matters of detail they are superior. Far from it. And even were we thus inclined to rest contented with what has been accomplished, to let well enough alone-a supposition which I know is far from being true-such a course would not be possible. On all sides we meet with an array of critics, who are not sparing in their criticisms, those who are as ready to tear in shreds the fondest theories of our experienced leaders in educational thought, as are others to wound the feelings of our new and un-tried teachers with their frequently unreasonable and meddling criticisms.

It is my purpose now to consider more particularly some of onr methods of teaching, and to point out in relation to them what are, in my judgment, our improvements, and. on the other hand, what are some of our chief weaknesses. I cannot, nor do I desire, to make reference to all of them, and
there probably will be no natural sequence in the order in which I place them.

First of all, then, I shall call attention to the training of the power of observation. Education has deen defined as the harmonious development of all the powers of child nature. We are concerned here, of conrsc, only with the education of the child. Taking that definition as a criterion, I believe that it is only within the last twenty-five years that any very great effort has been made-I do not say how successfully-to meet its requirements, that is, to reach all the facuities of the child. The power of observation is one of the earliest faculties, as it is one of the last that we are systematically training. The natural sciences are the subjects which, more than any others, are instrumental in this development. The practical work which the examination of a buttercup or the preparation of hydrogen necessitates, is undoubtelly educative. In connection with this. I must say that I think we ought to welcome with pleasure the introduction of a comparatively now feature of school work, namely, Mantal Training and Domestic Science. They provide a splendid training for the eve and hand, in neatness and accuracy, and, in addition, they have the advantage of being practical.

And yet we are all conscious of the strenuous opposition with which the introdnction of these branches is being met. The opposition, also, is not altogether from ontside; many teachers, if not actually opposed, are at least lukewarm in their support. This is but natural: they see in it an addition to the already crowded curriculum. But these subjects have come to stay, and all that can be done is to make a re-adjustment or correlation of the subjects so as to provide time for these.

In the second place, it seems to me that the one faculty upon which we are exierting our greatest attention is the reason. To-day we teach mathematics. We need only to compare the present Unitary Method with the old system of, Proportion or the Rule of Three. From the earliest steps in number work to the most complex problems in geometry or algebra, every process is carefully reasoned out and explained. Not only in mathematics, however, are we applying the principles of reason. In grammar as well do we find scope for the use of this power. In my opinion, the analysis of a long and complex sentence affords nearly, if not quite, as good an opportmity for exercising the reason.

But it is in the realm of mathematics that reason is pre-eminently dominant. In the teaching of geometry, the deductive method is giving way to the inductive. This is a subject which, for at least seventy-five per cent of our pupils, will have no practical value. It is valuable only from an educative standpoint, and as such should indeed be taught in the way most fitted for the greatest development of power, of reason and of original thought. This surely is the inductive method. And yet, whether the inductive or deductive method is used, it is almost entirely reasoning. Algebra, again, has but little practical value. Here, also, the reason is developed.

Arithmetic, on the other hand, while affording opportunity for training in reason, has an eminently practical value, a fact which I fear we too often lose sight of in our teaching. We treat it much the same as we do geometry and algebra, forgetting that, in this subject, the "how" is of just as great. if not of even greater, importance than the "why."

It is in regard to this subject and the results obtained in its teaching that we meet with some of our greatest criticisms. We are all faniliar with them: that the boys of to-day camot add a column of figures correctly and quickly; that it takes them twice as long to work a simple commercial problem as their fathers, who had only two or three years' scloooling, etc. And we know, too, that in many cases these are not idle or mujust criticisms. . . . .

I do not mean to say that we do not need to have solutions written out. I believe we should, and carefully written, also. But what I do say is, that we might very well give more attention to the teaching of practical arithmetic. I believe that it is right that pupils should understand the reasons for their various operations at some time or other. I can understand that a pupil ought not to be permitted to subtract 29 from 75 in the old way: 9 from 5 you can't, borrow I from the 7 , makes 15.9 from 15 leaves 6 , and so on. But I believe that a great deal of time can easily be wasted in continual repetition upon the various reasons for things which might more profitably be spent upon drill in practical work. It may be all very well to manufacture two or three of the multiplication tables, but it seems to me a sheer waste of time to go thus through the whole list. And again, I do not see that it makes so much difference whether a pupil says the tables one way or the other, provided he can say them. The main object is that he should know them, and know them thoroughly; and once he does, it is of
little importance in using them which way he learned them. The great essential in arithmetic is to know how to work practical questions quickly and accurately; and to acquire this ability continuous repetition and drill is needed.

In what I have said in reference to the teaching of arithmetic, I do not wish to be muderstood as detracting from its value as a purely educative subject, as a means for the development of the reason. Nuch in the present method should meet with our heartiest approval. But at the same time I do desire to emphasize what seems to me a tendency to carry this method too far, and to emphasize also the need of a greater consideration of the practical side of the subject.

Further, I have felt that there is a growing tendency to apply the reasoning method almost exclusively to each and every subject of the school curriculum. This gives a splendid training for the one faculty, but it means a corresponding deficiency of development in other faculties. Chief among those powers of the pupil, which I believe are thus being sacrificed, is the memory. I am strongly of the opinion that our present-lay school may well learn a lesson from the past. We are not making the demands upon the memory which formerly were made, and which I believe we ought to make.

Some of our subjects, such as History and Geography, while permitting the use of reason to a great extent, are primarily memory subjects. These subjects give us certain facts relative to the earth and man's existence upon it. A question naturally arises here: Considering the great number of facts which history and geography present to us, what ought to be the minimum to be required of our pupils who complete the ordinary school course? To read our newspapers and literature, to take an active interest in national affairs, to be an intelligent citizen. it is indispensable that one should have a wide and accurate knowledge of the world's geography, and, though possibly to a less degree, of the world's history. This, then, is the answer, and what does it mean? That our pupils should be expected to know accurately the most important plysical features, political divisions, towns and cities, industries and products of all countries, and to know the history of their own country thoroughly, and of the world somewhat more generally, but still accurately.

Next we may ask: How is this knowledge to be obtained? And I would answer: I care not so much hoze it is obtained, provided it is obtained,

The reason may be brought into use in many instances, but the memory must be the main resort in the end. Constant drill in memorizing is the keynote.

Here, again, let us employ the reason, the eye, the hand, or any other power which may seem suitable; let us show the sequence of events when such a sequence is not beyond the comprehension of the pupil; but let us not forget the purpose to be aimed at in the teaching of these subjects, and the chief powers to be developed; let us not sacrifice results in order that we may adhere closely to the old time-honored maxim, a maxim which has become almost a fetich: "We must proceed from the known to the, unknown.

Were it not that our powers at Teachers' Institutes are somewhat prescribed, I should like to say a few words regarding our text-books in history and geography. At any rate, I trust I shall not be overstepping my privilege to any very great extent in stating, in all deference to those who have chosen these books for our use, my own serious opinion, an opinion which I believe is shared in common with many teachers throughout the country and throughout the province, namely, that our present text-books in these subjects, far from being an improvement upon the old, are indeed inferior to them.

I am conscious that my suggestions regarding the place of reason and memory in the teaching of mathematics and of history and geography may not be entirely orthodox. may not meet with universal approval. But I believe that very fow will be inclined to dissent when I say that in the domain of Literature our schools are sadly deficient in memory work.

The old Greeks and Romans were accustomed to memorize practically all of their poetry. John Bright, the great English orator and statesman. could recite with ease Byron's "Childe Harold:" Macaulay knew by heart the greater part of English. and indeed a great deal of classical poetry. Ruskin, the greatest master of English, has said that his command of the language was due to having had to learn, when a boy, long passages of the Bible and of poetry. Scores of others might also be mentioned. However. I readily realize that what was a necessity with the Grecks and Romans, when writing was so little in use. what was a possibility in the last century in England, when the natural sciences, werc almost unheard of, and mathematics were as yet in their infancy, is scarcely possible with us in this day, when our energies are divided among so
wide and varied a range of subjects. But surely much more could be accomplished in this direction than is being accomplished.

Our literature abounds with poetry expressed with grace and charm of language, resplendent with exquisite beauty, glowing with lofty sentiment, or thundering forth in tones of stirring and powerful inspiration. Aud it is a fact, I believe, and a most regrettable one, that our pupils are woefuliy ignorant of these elevating and inspiring poems. They may have a dim and hazy knowledge of them, but they have not that accurate knowledge and personal appreciation of their heauty which is only derived from closest study or memorizing.

I have laid emphasis heretofore upon the practical element in teaching, but I do not wish to underestimate another purpose to be sought, namely, the ethical and moral training. And surely it is to the study of literature that we may look for the greatest aid in this development. Poetry provides us "a means of learning and retaining much of the best and noblest thought which has ever been expressed. We cannot, at least so easily, memorize prose. There is in the very nature of poetry, in its rythmical flow, something which materially assists us in remembering.

Who of us does not feel better and stronger in being familiar with, in being able to recite, if you will, many of our best poems? We may read Southey's "Life of Nelson," with all its beautiful description: we may know thoroughly the history of Nelson's life: but these will never give us the thrill of pride and inspiration that we receive from those two short poems of Thomas Campbell, "Ye Mariners of England." and "The Battle of the Baltic." We may read the history of the rural life of England, but what can equal Gray's "Elegy" in its accuracy of descrintion of this very life? And it would be difficult perhaps to estimate the ethical and moral value of this poem, aside from its purely literary merit. Can any history or story so vividly portray for us the peaceful lives and unhappy wanderings of those unfortunate neople, the exiled Acadians as Longfellow's "Evanceline?" And how many others we might add to these!

We nccacionally hear the statement, that we have no Canadian literature. Fortunately this is, I belicve, only partly truc. We are developing a literature of prose. We have some writers of worldwide fame, such as Roherts. Sir Gillhert Parker and Ralph Comor. But as regards poctry. the criticism is possibly a just one. Tt is probably true that
poets are born, and not made; and it may also be true that the age of poetry is passing away. But may it not also be that a greater study and a more thorough knowledge of existing poetry would be an inspiration to succeeding generations to emulate the past? Is it not worth while making the effort?

There is just one other phase of school life to which I would invite your attention-a phase in which, I believe, lies one of our greatest weaknesses. It is summed up in the one word-" Work." If the school of the old days had one special merit, it was this,-that it was a serious place, it was a place for work. The birch rod and the leather thong of the schoolmaster may not have been the embodiment of the best educational methods, but they at least succeeded in turning out men who would work. To-day our schools are lacking in this spirit of earnestness. From the earliest days everything is made so easy and plain for the pupil, all the diffculties are so clearly explained, that he has come to consider school simply as a place where he may remain more or less passively still, and be filled, at least filled sufficiently to enable him to pass certain examinations, and receive at the end of his career a high school or other certificate.
I do not so much mean that more work should be done, though that, I believe, is very possible, as that more serious work should be done, and by the pupils. Teachers do too mucli; the pupils too little. The latter should be made to realize that there is a certain amount of hard grinding, and they should be expected to tho this. It is not always necessary or important that they know why; it is sufficient that they do it. It will be a splendid training in diligent application such as will be of inestimable value to them in after life. They are not too young to begin. I believe we often err in making mueh of our work too easy, and not demanding enough work, simply for the pure work's sake. How much greater is our appreciation of that which we have obtained by hard, consistent plodding? Memory: work in literature is applicable here. It does not matter that the pupil may not mulerstand all that he is asked to memorize. He will retain it, and later he will understand, when he will not have the time or opportunity for learning. There are marked differences of opinion as to the amount of work to be required from the pupils. I am of the opinion that our demands are too small, rather than too great. Above all, let us impress upon the pupil the idea that school is a place not for play, but for work; let us begin the training which will fit
him to become an active and useful citizen. Milton has defined education: I call that a complete and generous education that which fits a man to perform skilfully, justly and magnanimously all the offices, both public and private, of peace and war. This has been generally accepted as a sound and comprehensive definition. To meet the requirements which it suggests. goorl, hard, earnest work is necessitated.

It is quite possible, indeed very probable, that some of the ideas which I have expressed are not altogether in harmony with accepted pedagogical principles. But I am little concerned as to that. My purpose has been to bring before the Institute some ideas which may be suggestive of thought and discussion, and thus lead, in some degree at least, towards that purpose for which we are assembled herc-the improvement of our present methods of teaching.

## Yussouf.

A stranger came one night to Yussouf's tent, Saying. "Behold one outcast and in dread, Against whose life the bow of power is bent. Who flies, and hath not where to lay his head; I come to thee for shelter and for fond.
To Yussouf, ealled through all our tribes 'The Good'."
"This tent is mine," said Yussouf, "but no more Than it is God's ; come in, and be at peace; Freely shalt thou partake of all my store As I of His who buildeth over these
Our tents His glorious roof of night and day, And at Whose door none ever yet heard Nay."
So Yussouf entertained his guest that night, And. waking him ere day, said: "Here is gold; My swiftest horse is saddled for thy flight: Depart before the prying day grows bold." As one lamp lights another, nor grows less, So nobleness enkindléth nobleness.
That inward light the siranger's face made grand, Which shines from all self-conquest; kneeling low, He howed his forchead upon Yussouf's hand. Sobhing: "O Sleik, I cannot leave thee so; I will repay thee; all this thou has done [into that lbrahim who slew thy son!"
"Take thrice the gold," said Yussouf, "for with thee Into the desert, never to return,
My one black thought shall ride away from me; First-born, for whom by day and night I yearn. Balanced and just are all of God's decrees;
Thon art avenged, my first-horn, sleep in peace!"
-James Russell Lowell.
I find the Review very helpful. I could not do without it now.

Nellie B. Croan.
Durham, N. B,

## Suggestions for Christmas Exercises.

Appoint a committee, with the teacher as chairman, to decorate the schoolroom. Let everyone do something to help, however little. Borrow pictures for the day. Have a Christmas tree. The hints in this and previous numbers of the Review may be helpful in furnishing it; and also in providing readings and recitations for a public entertainment, to which the parents and friends of the children should be invited.

An exceedingly pretty custom in some primary rooms is to direct the children in the making of tiny Christmas baskets, which they place about the room on shelves and window-sills, to see if Santa Claus will fill them in the night.

When the baskets have all been made and placed, two or three children who most need the lesson are kept, and asked if they would like to be Santa Claus. A small package is produced. One child puts a raisin in each basket, and another a candy. These baskets are in sight, but above reach, and their examination makes part of the last day celebration.

In all work and exercises during the month, keep the significance of Christmas before the children. It brings before us the life of Christ; teaching us self-sacrifice and unselfishness; going about continually doing good. Let each resolve to do at least one kind act, and to speak at least one kind word to some one, every day, and to keep it up during the next. How such speaking and doing would change the world in a little time!

## Empty Stockings.

Oh, mothers in homes that are happy Where Christmas comes laden with cleer, Where the children are dreaming already Of the merriest day in the year,

As you gather your darlings around you And tell them the "story of old," Remember the homes that are dreary! Remember the hearts that are cold!

And thanking the love that has dowered you With all that is dearest and best,
Give freely, that from your abundance Some bare littlc life may be blessed!
Oh, go where the stockings hang empty, Where Christmas is naught but a name,
And give-for the love of the Christ-child!
'Twas to seek such as these that He came.
-Ladies' Home Journal.

## The Christmas Spirit.

An elderly man was on the stage at the Five Points Mission one Christmas day. He addressed the audience thus: "Forty ycars ago I came in here on a Christmas Eve. I was ignorant, I was wicked, idle, and was wandering about. The room was full of just such fellows. . Mr. Pease asked us what good we had done, saying that those who worked did good; and pretty soon he took us into another room, and we had quite a feast. After that he said he had shown us the way and we must do the same for our fathers and mothers and all who needed it.
"I went away and camc back the next Sunday, as he asked, and he recognized me. 'What good have you done, John ?' he asked. I said I had got some work and that the boss had praised me. He replied, 'If you keep right on yont are a saved man; Christmas has got into your boots sure enough.'
"I kept on, right on. I went to evening school in Marion street; I dropped my old bum acquaintances and learned the enginecring business and am now an engineer on an Atlantic steamer. I have come here fo tell yon to have the Christmas spirit; try to help some one to get the Christmas spirit."

There is power in the Christmas spirit. Its influence may make a new life dawn in the heart.

## A Christmas Scene.

In our efforts to cultivate a spirit of unselfishness and of willingness to give and make others happy, we must be carcfill not to overdo and make the Chrismas story seem prosy to the child. If so, we are apt to destroy the spirit that we aim to cultivate. We must not ignore what has been, perhaps, his whole pleasure and thought heretofore, that is, the Christmas tree and Santa Claus. Last year while we were studying the story of Christmas, we made a Christmas scene in the sand table.

We got some evergreen branches and arranged them to form a tree. We fastened this tree securely in one corner of the sand table. The pupils made pink and white paper chains, to decorate the tree with. This was to be a play Christmas tree, so we cut apples, oranges, stockings, stars, etc., from colored papers and hung these on a tree. In our construction work, we had learned to make boxes, baskets, and sleds, so we made these for presents also.
When the tree was completed some one suggested that we have a Santa Claus. I drew an outline of Santa on heavy paper. One of the pupils cut this out and with the assistance of several others. Santa was appropriately dressed. His clothes were made of colored paper and pasted onto the form. Then a standard was pasted at his back so that he could stand by the tree. Now, we wanted a ladder. The making of this ladder furnished busy work for two pupils during a recitation. The ladder was one foot long and the steps were two inches apart. We made it of blue blotting paper, and we placed it so that it leaned against the tree.

Now we needed a reindeer and a sled. We made a large sled similar to the small sleds that we made and filted it with presents, such as dolls, horns, balls, etc., which the pupils cut from paper. For some time we couldn't get any reindeer, but the pupils were on the lookout and finally two
were found and answered the purpose very well. They cut these pictures of the reindeer from covers of two December magazines, then pasted them on heavy paper. They then cut them from the heavy paper, and pasted a standard to the back of each. They placed the reindeer in line, in front of the sled, and hitched them to the sled with red paper harness. This completed the scene in the sand table.

The making of this scene furnished materjal for a great deal of busy work and a great deal of pleasure. Of course this was a real play tree; we did not give the presents to any one, but we played that we were making them for some one. Whenever a child made anything for the tree he had the privilege of telling us for whom he made the present. Sometimes the present was made for some one of the family. Again, somcthing was made for some character in a story. Several presents were made for the "Little Match Girl." One little pupil always made her presents for a little colored girl who had lost her mamma.
In addition to this work, each child made two real presents to give away, but I think the play tree was a help in cultivating the real Christmas spirit.-Primary Education.

## 'Tis Christmas Day.

'Tis Christmas Day and we are far from home, But not so far as He , the Child, who came
That winter night down from the starry dome To give us life who call upon His name.
'Tis Christmas Day-the East repeats the word And then forgets the meaning of His birth,
Forgets the carols that the shepherds heardHow Heaven itself proclaimed Him to the earth.
'Tis Christmas Day, and those afar we love Send messages of peace on earth and cheer,
But He who brought these with Him from aboveOur guest from Heaven-found cheerless welcome here.
'Tis Christmas Day, the welcome long delayed
Is ours to give once more: Come, littlc Child,
And dwell within our hearts, for they were made
To be Thy home all sweet and undefiled!
-Chautauquan for December.

## The First Christmas Tree.

Once upon a time the Forest was in a great stir, for the wise old Cedars had told of strange things to be. They had lived in the Forest many, many years; but never had they seen such marvelous sights as were to be seen now in the sky, and upon the hills, and in the distant village.
"Pray tell us what you see," asked a little Vine.
"The whole sky seerns to be aflame," said one of the Cedars, "and the Stars appear to be dancing among the clouds; angels walk down from heaven to the earth and talk with the shepherds upon the hills."
"How I should like to see the angels and the Stars!" sighed a little Tree near the Vine. "It must be very beautiful. Oh, listen to the music !"
"The angels are singing," said the Cedar.
"And the Stars are singing, ton," said another Cedar, "and the shepherds on the hill join in the song."

The Trees listened to the singing, a strange song about a Child that had been born.

And in the early morning the angels came to the Forest singing the same song. They were clad in white; and love, hope, and charity beamed upon their faces, and their song was about the Child, the Child, the Child that had been born. And when they left the Forest one angel remained to guard the little Tree. No danger, no harm, came to it, for night and day the angel watched the little Tree and kept it from evil. So the years passed, and the little Trce became the pride and glory of the Forest.
One day the Tree heard some one coming from the Forest.
"Have no fear," said the angel, "for He who comes is the Master."
And the Master came and stooped and kissed the Tree, and many times He came and touched its branches and went away. And the Tree loved the Master for His beauty and His goodness.
But one night alone into the Forest came the Master, and He fell upon His knees and prayed. In the morning there was a sound of rude voices and the flashing of swords, and strange men with axes cut the Tree down. And the Trees of the Forest wept.

But the Night Wind that swept down from the City of the Great King that night stayed in the Forest a while to say that it had seen that day a cross raised on Calvary-the Tree on which was laid the body of the dying Master.Eugene Field.

## The Christmas Tree.

The Christmas tree is of German origin. As early as 1632, the little German children enjoyed the Christmas tree. The usual German Christmas tree is decorated with tiny colored candles representing stars, while in the very top nestles the figure of an angel, typical of the holy Christchild.

The German parents will make many sacrifices that their little ones may enjoy a Christmas tree.
The raising of cvergreens for Christmas trees has become an active industry in Germany, and for weeks before Christmas the shops are bowers of greenery.

This German custom has reached far across the sea, and now no Canadian boy or girl thinks Christmas complete without the beautifu] Christmas tree.

## Winter Pictures.

Down swept the chill wind from the mountain peak,
From the show five thousand summers old;
On open wold and hill-top bleak
It had gathered all the cold,
And whirled it like sleet on the wanderer's clieek;
It carried a shiver everywhere
From the unleafed bough and pastures bare;
The little brook heard it and built a roof
'Neath which he could house him, winter-proof;
All niglit by the white stars' frosty gleams
He groined his arches and matched his beams;
Slender and elear were his crystal spars
As the lashes of light that trim the stars:
IIe sculptured every summer delight
$I_{n}$ his halls and chambers out of sight;
Sometimes his tinkling waters slipt
Down through a frost-leaved forest-crypt,

Long, sparkling aisles of steel-stemmed trees
Bending to counterfeit a breeze;
Sometimes the roof no fretwork knew
But silvery mosses that downward grew;
Sometimes it was carved in sharp relief
With quaint arabesques of ice-fern leaf;
1 Sometimes it was simply smooth and clear
For the gladness of heaven to shine through, and here
He had caught the nodding bulrush-tops
And hung them thickly with dianond drops, Which crystalled the beams of moon and sun,
And made a star of every one.
Within the hall are song and laughter,
The cheeks of Christmas grow red and jolly,
And sprouting is every corbel and rafter
With the ligltsome green of ivy and holly;
Through the deep gulf of the chimney wide
Wallows the Yule-log's roaring tide;
The broad flame-pennons droop and flap
And belly and tug as a flag in the wind;
Like a locust shrills the imprisoned sap,
Hunted to deatlo in its galleries blind;
And swift little troops of silent sparks,
Now pausing, now seattering away as in fear,
Go threading the soot-forest's tangled darks
Like herds of startled deer.
-James Russell Lowell-The Vision of Sir Launfal.

## Busy Work for December Days.

Try, for the morning exercise, reading one of the fascinating stories of the Bible and then have the school repeat some favorite Psalm or a chapter from Proverbs.
For quick work see how many words can be written in a minute, about Winter Plays, Snow Storms, a Sleigh-ride, Trees in Winter, etc.

See who can write the longest list of authors in two minutes.
Let the sehool learn such pieces as "Lines for the Christmas Season," "Winter Pictures," and others in this month's Review. Very few children are so young they cannot see the beauty of good poetry.

## A Christmas Enigma.

I am composed of thirty-one letters. The answer to each unestion is given in the letters represented by numbers, which follow it.
r. What is the chinly scason when right merry you hope to be? 27-10-17-12-29-5.
2. And when the Christmas eve is here, what do you long to see? 7-20-31-10-15-12-2-19-11-12-31-3-26.
3. How do you feel when your tasks are o'er and the holiday time is here? 8-16-23-22-28.
4. And what is the lovely emblem of this season of joy and cheer? ti-12-30-4.
5. What do you hope in your stocking to find in a beauliful, bountiful horn? 7-21-25-18-24.
6. IIow do you feel, when with shonts of glee, you welcome the Christmas morn? $13-29-9-4-24$.
7. And what is the day when your friends you meet, with wishes loving and kind? $-17-3-27-6-29-14-9-15-\mathrm{T}-\mathrm{T}-28$.
Nuw put these letters thgether, and there our greeting sinecre you'll find.

## Lines for the Christmas Season.

'Tis the time of year for the open hand And the tender heart and true,
When a rift of heaven has cleft the skies, And the saints are looking through.

> -Margaret Sangster.

For they who think of others most, Are the happiest folks that live.
-Pheobe Cary.
Ring and swing
Bells of joy I On morning's wing
Send the song of praise abroad!
With a sound of broken chains
Tell the nations that He reigns,
Who alone is Lord and God!
-Whitlier.
The journeyers to Bethlehem,
Who followed trusting from afar
The guidance of that happy star
Which marked the spot where Christ was born
Long years ago one Christmas morn!
-Frank Dempster Sherman.
Still in memory undying,
Stands afar the lowly shed,
Where a little child is lying
In His manger-bed.
Still the promise of love's dawning
Deepens into perfect day;
For the joy of Christmas morning
Shall not pass away.
-Selected.
As we meet and touch, each day,
The many travellers on our way,
Let every such brief contact be
A glorious helpful ministry-
The contact of the soil and seed,
Each gives to the other's need.
Each helping on the other's best,
And blessing each as well as blest.
-Susan Cooitge.
"Three good cheers for old December!"
Month of Christmas trees and toys,
Hanging up a million stockings.
For a million girls and boys.
O. dear December, hurry on;

Oh, please-oh, please, come quick;
Bring snow so white,
Bring fires so bright,
And bring us good Saint Nick."
-Selected.
Oh! who can tell the brightest month,
The dearest and the best?
We really think December is
The crown of all the rest.
For that's the happy month that brings
The Christmas joy and mirth,
And tells us of the little Child
Who came from heaven to earth.
-Selicted.

Love is the secret sympathy,
The silver link, the silken tie,
Which heart to heart, and mind to mind,
In body and in soul can bind.
-Scott-Lay of the Last Minstrel.
Sing, Christmas bells!
Say to the earth this is the morn
Whereon our Saviour-King is born;
Sing to all men,-the bond and free,
The rich, the poor, the high, the low,
The little child that sports in glee,-
The aged folks that tottering go,-
Proclaim the morn
That Christ is born,
That saveth them and saveth me.
-Eugene Field.

## The Christmas Baby.

"Tha'rt welcome, little bonny bird, But shouldn't ha' come just when tha' did: Teimes are bad," -English Ballad.
Hoot! ye little rascal! ye conse it on me this way,
Crowdin' yerself amongst us this blusterin' winter's day, Knowin' that we already have three of ye, an' seven,
An' tryin' to make yerself out a Christmas present o' Heaven?
Ten of ye have we now, Sir, for this world to abuse;
An' Bobbje he have no waistcoat, an' Nellie she have no shoes,
An' Sammie he have no shirt, Sir (I tell it to his shame),
An' the one that was just before ye we ain't had time to name!
An' all o' the banks be smashin', an' on us poor folk fall ;
An' Boss he whittles the wages when work's to be had at all;
An' Tom he have cht his foot off, an' lies in a woefu] pliglat,
An' all of us wonders at mornin' as what we shall eat at night;
An' but for your father an' Sandy a findin' somewhat to do,
An' but for the preacher's woman, who often helps us through,
An' but for your poor dear mother a-doin twice her part.
Ye'd'a seen us all in heaven afore ye was ready to start!
An' now ye have come, ye rascal! so healthy an' fat an' sound,
A-weighin', I'll wager a dollar, the full of a dozen pound!
With yer mother's eyes a tlashin', yer father's flesh an' build,
An' a good big mouth an' stomach all ready to be filled!
No, no! don't cry, my haby! hush up, my pretty one!
Don't get any chaff in yer eye, boy-I only was just in fun,
Ye'll like us when you know us, although we'er cur'us folks;
But we don't get much victual, an' half our livin' is jokes!
Why, boy, did ye take me in earnest? come, sit upon my knee;
I'll tell ye a secret, youngster, I'll name ye after me.
Ye shall have all yer brothers an' sisters with ye to play.
An' ye shall have yer carriage, an' ride out every day!

Why, boy, do you think ye'll suffer? I'm gettin' a trifle old.
But it'll be many years yet before I lose my hold;
An' if I should fall on the road, boy, still, them's yer brothers, there,
An' not a rogue of 'em ever would see ye harmed a hair!
Say! when ye come from heaven, my little namesake dear, Did ye see, 'mongst the little girls there, a face like this one here?
That was yer little sister-she died a year ago, An' all of us cried like babies when they laid her under the snow.
Hang it! if all the rich men I ever see or knew
Came here with all their traps, boy, an' offered 'em for you, I'd show 'en to the door, Sir, so quick they'd think it odd Before I'd sell to another my Christmas gift from God!
-Will Carleton-Farn Legends.

## Hilda's Christmas.

Standing apart from the childish throng, Little Hilda was silent and sad; She could not join in the happy song, She could not echo the voices glad.
"What can I do on Christmas day?
I ant so little and we are so poor,"
She said to herself in a dreary way;
"I wish there was never a Christmas more.
"Nother is sick and father can't know
How children talk of their gifts and joy,
Or he'd surely try, he loves me so,
To get me just one single toy."
"But Christmas isn't for what you get,"
She heard a small, sweet, tender voice,-
"It's for what you give," said wee Janet,
And the words made Hilda's heart rejoice.
"It isn't our birthday," went on the mite,
"It is Christ's, you know; and I think he'd say
If he were to talk with us to-night
That he'd wish us to keep it his own way."
A plan came into Hilda's head;
It scemed to her she could hardly wait.
"I can't give nice things," she bravely said,
"But l'll do what I can to celcbrate."
"I can give the baby a day of fun?
l can take my plant to the poor, lame boy;
I can do mother's errands-every one;
And my old kite I can mend for Roy.

- 1 can read to father and save his eyes;

1 can foed the birds in the beust grove;
1 can give the squirrels at fine surprise;
And Grandma shall have a letter of love."
Now when that busy day was done,
And tired llilda crept to bed.
She forgot that slie had no gift of her own, 一
"What a lovely Christmas it was!" she said.
-M. A. L. Lane.

## The Great Guest Comes.

"While the cobbler mused there passed his pane
A beggar drencled by the driving rain,
He called him in from the stony street
And gave him sloes for his bruised feet.

The beggar went and there came a crone Her face with wrinkles of sorrow sown. A bundle of faggots bowed her back, And she was spent with the wrench and rack.
He gave her his loaf and steadied her load
As she took her way on the weary road.
Then to his door came a little child,
Lost and afraid in the world so wild,
In the big, dark world. Catching it up,
He gave it the milk in the waiting cup,
And led it home to its mother's arms,
Out of the reach of the world's alarms.
"The day went down in the crimson west
And with it the hope of the blessed Guest.
And Conrad sighed as the world turned gray:
'Why is it, Lord, that Your feet delay,
Did You forget that this was the day?'
Then soft, in the silence a Voice he heard:
'Lift up your heart, for I kept my word.
Three times I came to your friendly door;
Three times my shadow was on your floor.
I was the beggar with bruised feet;
I was the woman you gave to eat;
I was the child on the homeless street,"
-From a poem by Edwin Markham, in the December Delineator.

## The Months.

January brings the snow, Makes our feet and fingers glow. February brings the rain, Thaws the frozen lakes again.
March brings breezes sharp and chill,
Shakes the dancing daffodil.
April brings the primrose sweet, Scatters daisies at our feet.
May brings flocks of pretty lambs, Sporting round their fleecy dams
June brings tulips, lilies, roses, Fills the children's hands with posies.
Hot July brings thunder showers, Apricots, and gilly-flowers.
August brings the sheaves of corn; Then the harvest home is borne.
Warm September brings the fruit;
Sportsmen then loegin to shoot.
Brown October brings the pheasant,
Then to gather muts is pleasant.
Dull Nuvember brings the blast-
Hark! the leaves are whirling fast.
Cold December brings the sleet
Blazing fire and Christmas treat.
-Sara Coleridge.
He-" Why do we do the meanest and most hateful things to those we love the best?"

She-" I presume it is because no one else would stand it."-lippincott's.

## A Clock Song.

Tick, tock! ten o'clock 1
Little New Year
Is almost here.
Tick, tock! tick, tock!
Tick, tock! eleven o'clock!
While you sleep
In he'll peep.
Tick, tock! tick, tock!
Tick, tock! twelve o'clock!
Happy New Year
To you, my dear!
Tick, tock! tick, tock!
-Youth's Companion.

## For the Little Folks.

FILL IN THE BLANKS.
My hunter is a graceful -,
With ears alert at every -
And eyes that keenly glance -,
And feet that scarcely touch the --,
O'er lofty mount and lowly -,
And field, he runs with fleetest -
Wherever bird or hare is -,
His worth, untold by pence or -
If lost to me how deep the -
(The nine words left out all rhyme.)
An ill-natured teacher who was in a perfunctory way conducting a development lesson was seeking to lead the class up to the word "breathing." "What did I do the moment I came into the world," she asked. "What have I kept doing ever since" What can I not stop doing without ceasing to be myself?"

The class was listless, and nobody tried to answer for a while. Finally one surly-looking boy raised his hand.
"What is it?" asked the teacher.
"Finding fault," was the reply, and all the class showed signs of animation.-School Bulletin.

Always talk over a pupil's misconduct alone with him. One good private talk with a pupil is worth twenty reprimands in, the presence of the school. It is worth everything to get the pupil's point of view, to let him state his side of the case fully and freely. Listen to all he has to say, and tell him frankly and kindly where he is in the wrong. He will trust you after such a talk as he never will if you "jump on him" before the school for every misdemeanor. Half our disciplinary troubles comes irom the outraged feeling of misguided pupils that they never had a chance to tell their side of the story.-Wistern School Necus.

## Recreations and Suggestions.

$\ldots$ - MYSTERIOUS CITIES.

1. A city used on a handkerchief. 2. Ferocious beasts. 3. To wander. 4. A place of worship. 5. Fine leather. 6. A pebble. 7. Result of contact with fire. 8. Part of a fowl. 9. A term used in speaking of young men. 10. A part of a human body and a small body of water. II. A cooking utensil and a great weight. 12. An extremity of the human body and a musical instrument. I3. Ground meats. 14. Part of a hog and a fortified town. 15. A portion of a week and a unit of measure. 16. Air in motion and a conjunction. 17. Christ's beloved disciple. 18. A stream of water and a species of tree. 19. Thorough cleansing of the body. 20. A weekly duty and 2,000 pounds. 21. A great German statesman. 22. A martyr president. 23. The Lord's Supper and an exclamation. 24. A welcome visitor and the price of admission.

Answers next month.
It is never wise to ask children at school for contributions of money or other gifts for any purposes whatever. There is no danger in being too careful in avoiding anything that may expose children to humiliation among class-mates. Children are by nature cruel. The girl who is able to contribute twenty-five cents is as likely as not to impress that fact upon those who have given less, or nothing. Let us try to keep alive by every means in our power the feeling of fellowship among the young. Differences of station and material advantages will be brought home to them altogether too soon after the doors of the school are closed behind them.Teachers' Magazine.

In the work of teaching, as in every other work, the only successful workers are those who are conscious of their shortcomings. What can be expected from teachers who are not only not conscious of their shortcomings, but conceited as to their ability-full of the opinion that they've reached the summit. We find such teachers everywhere, and will continue to find them everywhere, until we act fairly and wisely enough to grant just compensation for teaching. Higher salaries will bring to the schools those who know enough to know that they know but little, and those with this spiendid knowledge should supplant those who know so little that they think they "know it all."-Public School Journal.

## Points for the Teacher.

Talk but little.
The recitation is an opportunity for the child to talk.

Speak kindly to an angry pupil.
See nothing, yet see everything.
Let the rule, "Do right," be your only rule.
Know your lesson so thoroughly that a text-book, is unnecessary in the recitation.

Some pupils expect you to scold them. By all means disappoint them.

Sarcasm is a dangerous weapon. Use it not.
Have something interesting to tell your pupils every day. They will enjoy it.
Be slow to anger and plenteous in mercy.
Be cheerful. Let a smile speak the joy, peace and contentment that fills your lieart.

The schoolroom is a lome. Be sure that its mission is not a failure.

Expect good lessons, good behaviour, cheerful obedience, prompt and accurate work.

It takes pluck to be wise and courageous.
Every child needs the teacher's individual care and attention.

Know each child's home life. It will open the way to his heart.-School Education.

Encourage children to make, with their own hands, the gifts which they offer to their friends. They should be the outcome of personal exertion, not merely something given to them to be given away again, which has cost them nothing in pains or labor. If they cannot give their own handiwork, they should, at least, be required to earn the money which they spend in presents. It gives them some idea of the value of money, and teaches them in a degree how difficult it is to get and how fatally easy to spend.

It has seemed to me that the jugglery of figures is often thrust upon the little ones before they have much real idea of number. At first they need to express their views about things in good, plain English. No time need be wasted upon zcro, or one; not mucl on two. All that there is can soon be compassed; three and four present few difficulties. The pupils should be encouraged to talk, and talk freely, not in any set phrase, and have their mistakes pleasantly corrected.-George Howland.

## The Northumberiand County Teachers' Institute.

The thirtieth annual meeting of the Northumberland County Teachers' Institute was held in the grammar school, Chatham, October 25 th and 26 th. There were present about eighty teachers, representing the various districts of the county, and a good degree of interest was manifested throughout the proceedings.

Un Thursday, after the opening business, the President, B. P. Steeves, gave a carefully prepared paper upon Spelling Reform, of which the Institute showed its appreciation by unanimously passing a resolution favouring the use of the simple and more phonetic forms of words. Following this was a paper by W. T. Denham, B. A., upon Composition in Grades VIl and VIll. On Friday morning the Institute listened to instructive papers by Miss Laura A. Mills on Patriotism, and Dr. Cox on The Progressive Teacher. In the afternoon W. J. Young gave an illustrated lesson to pupils from Grade Vill on Trade Winds.

The following are the officers for the ensuing year: President, Jas. McIntosh; Vice-president, Miss Kathlene I. B. McLean; Secretary-treasurer, W. J. Young. Additional members of executive, Miss Muriel Ellis, W. T. Denham.
W. T. Denham, Secretary.
"Bachelors can be found roaming at large in all parts of the world. They inhabit apartments, clubs, open fields, bodies of water and music halls. They are also seen behind the scenes. They hover at times near front gates, and have been found in back parlors with the aid of a searchlight. Bachelors arc nomadic by nature and variable in their tastes, never going with one girl long enough to be dangerous. Bachelors make love easily, but rarely keep it. Rich bachelors are hunted openly and shamelessly, and are always in great danger. Those who finally escape are, as a rule, useless ever afterwards."-Tom Masson, in the December Delineator.

A theological student was sent one Sunday to supply a vacant pulpit in a Connecticut valley town. A few days after he received a copy of the weekly paper of that place with the following item marked: "Rev. Seminary, supplicd the pulpit of the Congregational church last Sunday, and the church will now be closed three weeks for repairs."-Cleveland Leader.

The ltalian government has approved of plans for the excavation of Herculancum.

Fiffeen thousand New Brunswick trecs will be destroyed this year by one man, who will ship them to New York to be sold for Christmas trees.

## CURRENT EVENTS.

The passengers and mails for the Orient which left London on Friday afternoon, November 16, reached Vancouver Tuesday morning, Nov. 27, in less than eleven days by the C. P. R. steamship "Empress of Ireland," and by train from St. John to Vancouver Truly the world moves:
With the opening of traffic on the Tehuantepec National Railway across Mexico in January, the trade route between the West Indies and British Columbia will be shortened by two thousand miles. 1 he railway itself has been completed for some time. Terminal facilities have now been provided on both coasts; and the line will be double tracked immediately.

The French government is building a telegraph across the Desert of Sahara. French explorers have found that the great desert is not such a terrible place as it was represented to be; and that much of it can be reclaimed by means of artesian wells at comparatively little cost.

The new C. P. R. steamship "Empress of Ireland" arrived at Halifax on the 22nd November and delivered the English mails on board a tender. These were at once conveyed to Montreal by a special train, making the run to that city in the unprecedented time of nineteen hours and fifteen minutes. The "Empress," without docking at Halifax, proceeded at once to St. John with passengers for the Orient and China mails, and twenty-four hours later these were on the special train for Montreal on the way to the west. This is the first time that St. John has been tested as a mail port with mails for the Far East.

The despatch of French and Spanish warships to Tangier seems to indicate new dangers in the Moroccan situation.

Captain Bernier, of the steamer "Arctic," has taken possession of several islands in Baffin's Bay, and raised the Union Jack. The steamer is wintering in Baffin's Bay, and next year will push as far north as possible along the west coast of Greenland.

The ninetcenth day of this month is the three hundredth anniversary of the departure of the first English colonists for Virginia.

In addition to what has already been done in behalf of the peasants, the Russian government proposes to submit to the new parliament, when it assembles in February, a law limiting the hours of labor in factories, and restricting the employment of women and children; a law establishing compulsory insurance of workmen against disease and accident, and providing for old age pensions; and a law for the sanitary inspection of factories and workmen's dwellings.

The Emperor of Russia has issued a remarkable decree, which makes all persons equal before the law. abolishes the poll tax, and releases the peasants for the communal system, so that they will be allowed to dwell where they
please. Heretofore the peasants, who form a very large proportion of the inhabitants of Russia, were not free to go from district to district in search of employment; but each was obliged to remain in his own community, unless he went to foreign parts or engaged in some other pursuit than that of agriculture. There was a sort of alien labour law for each community. Now the protection or restriction is removed, and an agricultural labourer can go wherever his labour is in most demand.
An edict has been issued in Chima forbidding the cultivation of the poppy and the importation and use of opium after a period of ten years. Imperial sanction has also been given to the plans for introducing a system of constitutional government in China. Each of the eighteen provinces into which the empire is at present divided is to have a constitution and a legislative assembly of its own.

The forecast of political events in Cuba is not reassuring. A new fight for Cuban independence is threatened, should the United States take permanent possession. On the other hand, there is a conspiracy to bring about an uprising whenever the United States forces are to be withdrawn, and so compel them to remain. The matter is largely one of class interest, the wealthy Cubans and foreigners who are interested in Cuban investments thinking that their property will be safer under United States protection, and the populace wishing to have the govermment of the country in their own hands, and hoping to improve their own condition at the expense of the large property holders and men of business. And so, it would seem, the natural resources of one of the richest countries in the world must still remain undeveloped for want of a settled government.

Japan's new battleship, the "Satsuma," is the largest battleship, in the world. It excells the British ship "Dreadnought," both in speed and in power; and, as in the case of the latter, its construction has been very rapid.
Captain Amundsen, the Norwegian explorer who has sailed through the Northwest Passage, is now returning to his home in Norway, where a great reception is awaiting him. It will take two or three years to work up the results of his observations, which are believed to be of great scientific value.

The return of Commander Peary from his Arctic voyage was announced from Newfoundland on November 2nd. He had failed to reach the North Pole; but had gone a few miles farther nortli than any previous explorer.

The Kecwatin conference at Ottawa has not resulted in an agreement for the partition of the territory among the adjacent provinces. The Province of Ontario asks that the castern boundary of Manitoba be extended northward to Churchill River, and follow that stream to its mouth, where is situated the only good harbour on Hudson liay; and that all the Keewatin territory east and south of that line
be added to Ontario. Saskatchewan asks that the territories of that province and of Manitoba be extended eastward to Hudson Bay, and that the Nelson River be made the boundary between them; thus giving to Saskatchewan the good harbour at Fort Churchill, and half the inferior larbour at York Factory. So each of these two provinces is willing to take a part of the District of Keewatin, and to give Manitoba the rest. But Manitoba claims the whole. A decision will be given later.

Armorial bearings have been assigned to the Province of Saskatchewan by royal warrant. They are described as follows: Vert, three garbs in fesse, or; on a chief of the last, a lion passant guardant, gules. This, being interpreted, means that the shield shall be green, with three golden sheaves of wheat in a line across it ; and that the chief, or upper third of the shield, slall be of gold, with a red lion, like the chief in the arms of the Province of New Brunswick, but with the colours reversed.

The soldiers in the British army are being tanght to sing, and regimental choral societies will be formed. The idea is taken from the German army.
the flow of the Colorado River into the Salton vanley, in Southern California, has been stopped, by building a dan nine miles in length. This was a great engineering feat, and was supposed by many to ve impossible. The river is now, however, flowing in its old channel, and the new Salton Sea will probably soon be a thing of the past.
The world's supply of platinum is so much less than the demand that the price has increased fourfold. It is now muclı more valuable than golit. The mines of Russia have heretofore been the chief source of supply; but the metal is found in several places in the Rocky Mountain region, and search is being made there for deposits that may be profitably mined.

Part of the city of Toronto is now lighted with electricity from Niagara.
secent improvements in the wireless telephone seem to promise that it will ultimately be of more mportance than the wircless telegraph. A French electrician has succeeded in sending a wireless telephone message from Toulon to Ajaceio, a distance of one hundred and eighty miles.
It is no longer a question whether an airship can Aly without being lighter than the air. Recent experiments in France have been so successful that a flying machine for practical use is regarded as one of the possibilities of the near future. It is predicted that air ships will be faster, safer and cheaper than automobiles.

Commander Peary, of the steamer "Roosevelt," arrived at Syducy, Saturday, November 24, after sixteen months exploration and battling with the rigours of the Arctic regions. The Commander and his crew, after madergoing many dangers in his trip to and from the north, reached the lighest point yet attained by explorers - 87 degrees 6 minutes north latitude.

## SCHOOL AND COLLEGE.

Rev. Dr. Thompson, who has been president of St. Francis Xavier College, of Antigonish, for the past eight years, has resigned to accept the pastorate of the parish of Glace Bay, Cape Breton. Rev. H. P. McPherson has been appointed president.

Mr. Ernest Robinson, late principal of Kings Co. Academy, Kentville, has been appointed to the position of viceprincipal of Amherst Academy, in succession to Mr. N. D. Mc'Tavish, who has gone to Wolseley, Alberta.

Kings College, Windsor, N. S., has a freshman class of fifteen, with nearly thirty students in residence.

The St. Andrews, N. B., Beacon suggests that town as a good place for the permanent location of the Summer School of Science. Several places have been mentioned in recent years where the school might "settle," with advantage, such as Parrsboro, N. S., and Shediac, N. B. St. Andrews has many advantages to offer the school, except the important one of geographical position.

One of the neatest collections of school work displayed at the recent Exhibition held in St. John, and that which took a first prize, was from the Convent school at Bathurst Village, N. B. The collection was the work of childrei in grades IV, V, and VI. It consisted of written quotations from their readers, with pencil illustrations in drawing, drawings in pen and ink, water-color paintings of Canadian wild flowers, Canadian birds in water-color, with a short description in writing of the bird.

The Kentville, N. S., school board has made the principal of the Academy in that town a member of the board; and many of the teachers are also invited to be present at its meetings, and confer with the members on the condition of the schools,-a most excellent practice, and one which has been attended with good results in Kentville and other towns of Nova Scotia.

Mr. F. C. Squires, B. A., is principal of the new consolidated school at Florenceville, N. B.

Mr. H. P. Dole has succecded R. C. Colwell, in the Moncton high school, as teacher of mathematics and botany. In the same schools, Miss E. A. Davis, takes the place of Mr. G. Fred McNally, who has gone to the West.

At the meeting in September last, of the Provincial Educational Association of Nova Scotia, Principals McKittrick and Lay were elected members of the Advisory Board, to assist the Council and Superintendent of Education. Recently the government made the five additional required appointments as follows: Prof. Howard Murray of Dalhousie University; Mr. A. G. MacDonald, Inspector of Schools, Antigonish; Principal Kempton, of Yarmouth; Mr. Hiram Donkin, C. E., Glace Bay, and Mr. William Cameron, B. A., Merigomish.
Miss Marshall Saunders, of Halifax, has won the $\$ 300$ prize offered by the American Humane Educational Society for the best essay on "What is the cause of, and the best plan for stopping, the increased growth of crime in our country." There were 57 competitors. This is the second time Miss Saunders has won a prize from that society. the first being $\$ 200$ for a humane story entitled "Beautiful Joe."

Mt. Allison University has received an additional bequest of $\$ 100,000$, from the estate of the late Jairus Hart, Halifax.

The address of Superintendent Dr.. A. H. MacKay, at the opening of the N. S. Educational Association is printed in full in the Nova Scotia Journal of Education for October. The Journal also contains much that is valuable to teachers.
Hearty congratulations are extended to Miss Gladys. Whidden, who was married to Mr. Ralph Jones in August last. This is Miss Whidden's second certificate in domestic service.-Acadia Athendeum.

## RaCENT BOOKS.

Wm. Briggs, Toronto, publishes a beautifully illustrated work, entitled Studies of Plant Life in Canada, by Mrs. Catherine Parr Trail, a new and revised edition with eight reproductions in natural colours, and twelve half-tone engravings, from drawings by Mrs. Agnes D. Chamberlain: The effeot produced in glancing over the pages is one of pleased surprise, that so many of the beautiful wild flowers of Canada are grouped with such exquisite skill and taste, and that it is possible to publish such a book in Canada. The binding, letter-press, and illustrations are admirable. The familiar style used by the author in her descriptions of the plants she knew and loved so well heightens the interest in her book, which will find many loving and admiring readers throughout Canada. The great majority of the plants figured and described are found in the Atlantic provinces. The poetic description and reverent attitude of the author towards the flowers of the field and forest will do much to make the book popular, while the careful revision of Dr. James Fletcher, of Ottawa, ensures its accuracy. No more acceptable and beautiful Christmas present than this could be made to a young person interested in plant life.
If "Greek must go" its spirit may remain with us, and enrich modern life and thought. Messrs. Auden and Taylor of the Upper Canada College, Toronto, have shown us an admirable way in which Greek may be retained and still used as an instrument of culture, in this little bookA Mininum of Greek. When the writer remembers the toilsome and roundabout way in which he acquired his "little Greek," (which he cherishes, though, as an inestimable possession), he wishes that such a book might have seen the light earlier. In a compact and really interesting book of less than two hundred pages the authors have reproduced the essentials of the Greek language, at least sufficient for the busy general student and man of affairs, and given a well ordered plan to secure an elemental knowledge of a language so valuable, especially in science and art. Its explanation of derivatives which occupies the larger part of the book is mainly useful. No one should lay claim to a liberal education without as much knowledge of Greek, at least, as this valuable little book teaches. Morang \& Co., Toronto, publishers. Price 75 cents.

The Macmillan Company, of Toronto, have published three books which form a valuable series to the student of English language: (1.) Emmerson's Outline History of the English Langwage ( 75 cents), a clear and concise record of our language, and the changes it has undergone; (2) Mitchell and Carpenter's Exposition in Class-room Practice ( 70 cents), a practical guide to clear writing,-the large space devoted to outlines of subjects and the unfailing interest of the material for this purpose being especially

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noteworthy; Carpenter's English Grammar (75 cents), contains the amount and kind of grammatical theory and practice most suitable for secondary school pupils. All of these books are neatly primed in large clear type, and are strongly bound. Buchanan and Stubenranch's Country Reader, number one ( 40 cents), offers much good material suitable for object lessons on domestic animals and farm life.

In Blackie's Story Book Readers (Mcssrs Blackie \& Son, London) : Ballantyne's "Coral Island;" Sir Walter Scott's "Claverhouse," from Old Mortality; G. A. Henty's "A Highland Chief," and Henty's "An Indian Raid." In red cloth covers, 4 d . each.

In Blackie's Modern Language Series: Voyage autour de ma Chambre, (1s. 6d.) and Vie de Polichinelle, (1s.) in red cloth; suitable and easy reading for beginners, with notes, questions and vocabularies. Lee Chateau de Vic, a fairy story (6d.), and LeBaron de Fourcheoix, (8d.) from Blackie's Little French Classic Series, provided with notes, vocabularies and exercises. La Petite Charité, a delightful little story for Christmas times (4d.), Cendrillon a fairy-scene in one act (4d.), Grosszaterchen und Grossmutterchen, a merry children's play in one act, (6d.)Blackic \& Son, London.
The Teaching of Modern Languages, three lectures by Cloudesley Brereton, M. A., is a comprehensive criticism on the methods used in teaching these and the so-called classical languages (15): Sir Joshua Reynold's Discourses (in part) on Art, a work of the first rank in literature,
(2s.) ; Bacon's Essays with introduction and notes; Scott's Quentin Durward, with introduction and notes (2s.)Blackie \& Son, London.

The British Empire, (2s. 6d.), a series of descriptive readings in geography on the various portions of the Empire, from original resources; those relating to Canada being of special interest to our teachers; Old Testament History, (3s.), a capital synopsis of parts of Old Testament History, especially useful to teachers who wish to present to fairly advanced students an introduction to biblical times; Arithmetical Exercises for junior forms, with easy oral exercises and problems. Messrs. Adam and Charles Black, London.

Philip's Model Atlas (is.), with fifty maps and diagrams in colour, of great clearness and beauty; accompanied with an index. Messrs. Geo. Philip \& Son, London.
Rafia Work with numerous illustrations (2s.), is a beatitifully bound and illustrated book, showing the mysteries of weaving and painting material for hats, baskets, mats, etc.-a valuable addition to school oceupations in American and English schools. George Philip \& Son, London.
Willkommen in Deutschland, with beautiful print and illustrations, is designed for the student in his second or third year's course in German, with grammatical exercises, notes and vocabulary. Messrs. D.C. Heath \& Co., Boston.
Messrs. Ginn \& Company publish a very useful Field Iaboratory and Library Manual (mailing price \$1.15). It contains seventy exercises adapted to the ability of students

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in the first and second years of high schools, normal schools, and academies, and is written in accord with the latest and best thought on the subject. Its aim is to direot pupils in their first attempts at scientific investigation and research.

From the same publishers we have a strongly written book on The Moral Damage of War, published for the International Union. (Price 75 cents.) It traces in successive chapters the moral damage of war to the child, to the soldier, to the politician, to the journalist, to the preacher, to the trader, and to the patriot. Wherever the work is read it will be a wholesome call to a better way of arbitrament among Christian nations than the brutal way of war.

## RECENT MAGAZINES.

The Acadia Athenaeum appeared in November with a new and choicely designed title-page. The University Monthly has been enlarged and improved. The November number coutained excellent likenesses of Chancellor Jones and the late Chancellor Harrison.

The Atlantic Monthly celebrates its jubilee this month with contributions by the three ex-editors still living-W. D. Howells, T. B. Aldrich and Walter H. Page, with other article apropos to the occasion. The New York Evening Post takes the initiative in offering jubilee congratulations. The Post pithily remarks that the motto of its Jubilee number might well be "qualis ab incepto," for the Atlantic has, in the main, held consistently with its ancient ideal-refinement and strengtl. "It is," says the Post, "the ablest of our magazines, standing on a level above even the most attractive of the New York illusirated magazines whose aim is to flatter the taste of l'homme moyen sensucl. Taking all things into consideration, we are inclined to regard it as the best of the general magazines published in the English language to-day "

The two most important of recent contributions to the discussion of reformed spelling may be found in The Living Age. The issue for November 3, contains an article of criticism and suggestion apropos of The President's English, by William Archer, one of the best-known English writers upon literary questions; and the number for November 17, opens with an article on Modern English

Spelling, by Professor Walter W. Skeat, than whom there is no higher authority on the subject.
The December Delineator is a typical Christmas number It will assist Christmas-makers with its hints for Christmas gifts and holiday entertainments, besides containing an abundance of seasonable literature calculated to fit in from now until New Year's Day. Christmas stories for adults are: Evergreen Trees, and The Shoplifter at Satterthwaite's; and those for children: The Blue Kimono, and Betty Evolves a Christmas Idea, by Elizabeth Preston Badger.

## Business Notice.

We are sending out in this number reminders to many of our subscribers. Others will be sent in the January or February numbers if our patrons do not anticipate us by remitting in the meantime without waiting to be reminded. The Review has been promptly sent ditring the year to its many hundred of subscribers. A prompt remittance now will be very acceptable.

Remember that the date on the mailing wrapper of your journal shows the time to which your subscription is paid.

## Wanted.

Teachers in Nova Scotia, preparing candidates for the Provincial examinations in science next July, to read my articles that have appeared the last half-dozen years in the Educational Review, or that may appear in futnre. The articles are suggested by experience gained in reading the answers of candidates, and I have endeavoured to help teachers and students in their work. Though there 1 s, I believe, some improvement, I feel sure that better work could be done in the schools and better results obtained at examinations if more attention were paid to the hints I have given.

John Waddell.

Exucational Review Fupplement, Famuary, 1907.


MISCHIEF BREWING.

# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

| Published Monthly. | ST. JOHN, N. B., JANUARY, 1907. |
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## CONTENTS:



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TIE EDUCATIONAL REVIEW:
Sr. John, N. B.
Tine REDEW thanks its realers for the many expressions of kindness and gool-will it has received from them cluring the past year and especially during the Christmas season. We wish for all of them A Happy New Year. every day of which may have some blessing and achievement in store for them.

Our picture this month represents one boy telling another a great secret. Whether there is "Mischief Brewing" or not may be left to the fancy of children. It is a gool picture from which to draw forth impressions from pupils and to let them write these impressions in the form of a story.

Belcher's Farmers' Almanac, 1907, for the Maritime Provinces, is a compendium of useful information on a great variety of topics, arranged in a form ready for immediate use. Price 25 cents. McAlpine Publishing Company, JIalitax.

Those who are accustomed to snowdrifts in the east will appreciate the conditions prevailing in Albertareferred to by our correspondent, Mr. W. 1;. Webb, who writes under date of December jo: "We have had great quantities of snow here, perbaps two feet on the level. It is almost always perfectly calm in the Edmonton district luring the winter, so that (lrifts are rare. When the snow melts it will be a great he'p to next year's crop. The snow-fall has been so light during the last two winters that this wi! be all the more needed next summer."

Lowl: of children, skill in teaching, and knowledge are three great reguisites for teachers. The first is born in nearly all human beings and is susceptible of cultivation. It is the great regusite for teaching. Knowledge, and the skill in imparting it, come from earnest pleasant toil which has its stimulus in love for children and a clesire to awaken their interest and self-activity. Teachers who simply hear recitations and teach with text-book in hand usual!y fail to aronse the minds of their pupils.
()NE effect of Carnegie's large gifts to the S"cottish miversities is that teachers and students, where these gifts have been received, have leecome less earnest. This is not to be wondered at. Many of scotland's most famous schotars have won their education in spite of powerty and bey self-denial, and have preserved their self-reliance mader difficulties. It is this character and self-reliance which counts. If it is sapped at the outset of the stumlent's career the results camon but be lamentable: and this is trate the world over. "lope is perlaps wishom in giving to miversities where their effectiveness is inereased byemblownents and other additions tor their resontres; but such gifts to persons may be lonked at with some suspicion.

# Glimpses into Schoolrooms. 

## By the Editor.

A few weeks ago I visited a country school of two departments. The principal's room was large for the number of scholars in it, well ventilated and looked out upon a charming rural scene, with well kept houses and barns, acres of upland and meadow, in some cases carefully tilled, in others with evidence of neglect. The primary room was small and on occasions, the teacher told me, crowded. Above this was a room that had just been fitted up for manual training, and near by a plot of ground had been secured for a school garden. Teachers and pupils were rejoicing in the new order of things where pleasant occupations were in future to relieve the monotony of school studies.

I remembered the place. As a boy I had trodden the familiar roads and paths on my way to and from school. As a young man I had taught the school there. Many of the old landmarks had disappeared, among them the early schoolhouse, and afterwards the old hall that had served for a schoolhonse. In their place stood a more pretentious building of two departments; and now mantal training and the school garden have come and will add to the pleasures and activities of school life. As I looked over this neighborhood and saw where old houses had given place to newer and more comfortable homes. I saw with gladness that the spirit of progress had also entered the school, which, so far as I could judge, was vastly superior to that of my own boyhood and youth. But school officers, parents and teachers have yet much to learn and to do in reaching ont for still better things.

My next visit was to a school of five departments, in the neighborhood of a large city. The buildings are on a commanding site overlooking a picturesque country-a slad prospect for little eyes wearied of poring over the printed page. The rooms were neat and attractive, hung with pictures, and in the principal"s department was a reading table with a good selection of magazines and books. The scholars were all attentive to their work and happy. Evidently the "whining school boy" of Shakespeare's time is a rarity in schools like those of to-day.
ln one of these rooms where $I$ spent a longer time than ustual, I remarked on the excellent discipline. The teacher told me that it save her no trouble. Ifer scholars were interested in their work and there was the evirlence of grod order and sympathy be-
tween teacher and pupils. That was the secret. The teacher, a bright young woman, told me that she walked to her school every morning, a distance of two miles, and back in the afternoon, in all weathers, and had not missed a day from school for five years. I thought of the good air and exercise and of theopportunity such a walk afforded of making many little plans for school work; and I thought this, too. had something to do with helping to make up a happy, well disciplined school.

The class of fifth and sixth grade pupils was engaged in a number lesson. The work was chiefly done with pencil and chalk, and with large numbers. This led me to think that such work can best bedone (I make the simple suggestion) up to the eighth grade without chalk or pencil. The important thing in teaching arithmetic is skill and quickness: in the manipulation of numbers, and small numbers: are better than large ones for this purpose. More alert, mental work in arithmetic and less figuring with pencil, which serves to divide the attention of the child, should prevail in all the classes, at least as far as the high school.

I dropped into a city school a few days ago, not with the purpose of hearing a lesson, but to consult with one of the teachers. I found the principal's room, and was impressed with the good order prevailing, the neatness of the room, and the spirit of industry that seemed to prevail. This building, too, is situated on a hill which commands a broad look over hills and valleys, with a considerable river view. In the other rooms visitesi I noticed some. excellent work in writing. The letters formed were neat. large and clearly cut, no evidence of a cramped hand. What a relief it is to see writing of this character!

In future visits to schoo's I hope to describe more fully some impressions of the work that is being done.

## Answers to Questions.

The following are the names of the " $\$ rysterions" Cities," in answer to questions fonnd on page 161 December Review: i, Cologne; 2, Lyons : 3. Rome: 4, Christ's Church; 5, Morocco: 6. Little Rock: 7. Berne ; 8. Brest ; 9. Ghent ; io, Liverpool : i i. Canton: I2, Leghorn; i3. Bo'ogina: I4. Hamburs: is. Dayton; 16. Windsor: 17 . St. Joln: i8. Prookiyn: 19, Bath: 20. Washington: 21 . Bismarck: 22. Lincoln; 23. Sacramento: 24, Santa Fe.-The. Teachers' Gazotte.

## Field Clubs and Nature-Study.

We are glad to notice that the Picton . Academy Scientific Association has been reorganized, and has already published two bulletins sriving intercsting details of collections of local fanna antel flora of the neighborhood. This association has done sonle excellent work in years past, work that has helped to make the scientific resources of Picton county better known than of any other county in the province. It was organized in 1882 under the supervision of A. H. Nackay, then principal of licton Icackemy. whose scientific work in earlier numbers of the RIEVIEW is still gratefully remembered The birds and plants of l'ictou county lave been especially well stuclied, and the uames of former members of the association, as I)r. Macドay. W. A. Ilickman and C. B. Robinson, are among those who lave done important work in seicnce. The revival of the association and the re-issue of the bulletins speak favorably for the prospects of nature-stndy in l'ieton connty.

This is a gool example for every academy and school in these provinces. Every teacher with some push and a little abli!ity could organize an out-dome club for the study of the physical features, the plants and animals of the neighborlood. It would add zest to the other sclool studies; it would be a metul recreation; it would make nature-study a livinge subject in every school, and it would make pupils pleasanty acpuainted with their surromndines. If only a few birds, plants and insects each year were found out and studied in their native hatnts, it woth! be a great gain.

Try it! if onty for the pleasure there is in some active field work that will take one ont of dixars with a jurpose in view.

## Shirking Work.

Many arown people as wel! as seloxal childrems do not like to work. It is much easier in ilriit intu habits of laziness, of take things easy, to expect hig returns on no investments, than to get down tor hated work and throngh it achieve success. (ireat phans usually come to nauglit because of personal haziness. Most perple believe in this doetrine for their children, and endeavor to practise it,-to have them clo as little work as possible. They want them to be free from drudgery. This seems on be matelral to many a parcut: but it makes the child flabloy, helpless, and a parasite in the commonity. Success in life alepends more on ability for do homes work, whether in the school, at home, or in the busy
industries of the world, than all other characteristics combined. ("hit.dren need to have their courage developed and trained, so that whenever they go at whatever is set them to do, they will stick to it till it is finished. Quickness of mind and vigor and strength are all reguired. Courage to do is of a high moral quality when it is directed to worthy (3)jects.

To have confidence in one's self, to be cheerful in foinge to have a defit $i$ c phrpose and to keep moving forward towarl its accomp'ishment, will bringe vietory in the end. The best gospel is work: work physical, work mental, and work moral. Work is the very condition of the enjoyment of life. Every groded thing in this worlet is the prodnet of work. livery parent w!o brings up his child to eschew work, to he indnged in idleness, to fritter away its time and its life in mere frivoities, hates his child and is preparing it for an iller or a tramp,-a fung ins wrowth for the state to take care of. Cofdhing children in sehool leads them to the same dire consefuences later in life. All sensibie persons feel a contempt for the itlers, the nseless, and the connterfeits of society.

Since the school is one of the greatest forces in the mantufacture of human character, ats teachens we must see to it that we are mot blameworthy. I teacher who is always grumbling about the weather, the seluetroom, the elrudgery oi his work, and a thousand other things, is preparing his pupils for idieness, dissatisfaction, and to becone a sort of luman shadows walling ainn!essly about. A good teacluer will coltivate in his pupils the power of sticking to a thing till the end is reached. Steady industry and diligence will bring rich results to (ne of arimary gifts. Self-inelepentence to be quis, and steady, to be chcerful, not to be hysterical, nut to have others continally bracing one up -are sumbe of the qualities that are abmired by igeht thanking perple. I strong. self-reliant spirit is alwas an inspiration to others.-Superintendent f. lí. ( hernoood.

Mrs. Tomplins went to visit her mother for a few diys, leavine her husband to eret his own mea!s. Finteringe the kitchen, be fotind she lated

- left a little note.

Ind this is what she wrote:
IT Kings, xxi. Iz.
When he himself hat ferl
This is what he read:
Find for yourself what he reatl.

GEOMETRICAL DRAWING. GR.VI.

|  | $f_{i g} 2 .$ |  | Fig. 4. |
| :---: | :---: | :---: | :---: |
|  | Fig. 6 . |  |  |
|  | Fis.10. | Fig 11 . | Fig. 12 . |
|  | Fig. 14. |  | $\text { Fix. } 16$ |
|  | Fig. 18 |  | Fis.20. |
|  | One inch |  |  |

## Geometrical Drawing.

F. G. Matthews, Truro, N. S.

Principal Macdonald Manual Training School.
The exercises presented this month are designed for grade VI. It will be noticed that the new principles introduced are not many in number, as those given for grade $V$ are constantly recurring, and also a certain space is given to exercises in which extreme accuracy is necessary. As several of the exercises have reference to angles and degrees, it is advisable to introduce the protractor at this stage. It need not be used so much for construction as to prove the truth of the angles made by compass methods.

For the benefit of teachers in grades V'I, VIl, or VHII, it should be stated that if they wish to conlmence work along these lines without any having been done in grade $V$, they should commence at the beginning. and take up the main principles. Also in response to some enquiries already made, it would be well to mention here, that this is not intended to supplement frechand or ruler drawing, but to be taught in conjunction with both.

FIg. I. To constract an angle cqual to a given angle.-Let CDE be the griven angle, and A the point at which it is required to make a similar angle. From A draw the line Al:. With C as centre auld any convenient radius, describe the are DE. With A as centre and the same radius, describe the are FG. Measure DE with the compasses and cut off FG equal to it. Join AG. Then GiAB is the required angle.
For an exereise let the children make an angle equal to a given one, but making the legs twice as long as the original. This will give an opportunity for showing that angles are not measured by the lengths of the sides, and therefore a grood introduction to a lesson on degrees and the protractor.
Fig. 2. To bisect an angle.-Let PAC be the given angle. With A as centre and any radius described the are BC. With $P$ as centre and any: radius more than half BC describe an are. With C as centre and the same radius described another are cutting the first in D. Join MD. This line bisects the angle.

Exerese.-The two lines forming the angle represent two of the fences bounding a piece of ground. The owner wishes to make a path across the land beginning at $B$ and keeping equidistant from the two fences. Lay ont the path.

Fig. 3. The same as Fiig. 2.-Set spuare methenl. Wark off a point on cach leg equidistant from B.

Place the set square with one edge on BC , and the corner at $E$ and draw the line EG. Similarly from D draw DH . Join B to the point of interscetion F .

Fig. 4. To trisect a right angle.-From A as centre and with any radius describe are BC. From B and C as centres and the same radius describe ares cutting the first in E and D . Join AD and AE. Most children will solve this exercise without any instruction. If not, a few questions on degrees will have the desired effect.

Fig. 5. To construct angles of $15^{\circ}, 30^{\circ}, 45^{\circ}$, $60^{\circ}, 75^{\circ}$, or $105^{\circ}$. Draw the right angle BAC. Mark off D and E as in the previous exercise. Bisect CE for $15^{\circ}$. Cl; or EI) for $45^{\circ}$ and DB for $75^{\circ}$. For $105^{\circ}$ mark off BK cqual to l3L.

This is simply a combination of exercises 2 and 4 , and can also be solved by the chiddren without assistance.

Fig. 6. To divide a straight line into any munber of cqual parts.-Let $A B$ be the given line. It is required to divide it into 7 equal parts. Draw $\triangle C$ at any angle with AB. Mrake the angle ADF equal to the angle BAC (Ex. 1). Step off 7 equal divisions of any convenient length on AC and 13F. Join $A$ to 7,1 to 6 and so on as shown in the diagram. These lines will divide AB into 7 equal parts.

This exercise may be varied in form, such as:Cut off $1-5$ of All; or, Als represents the length of a piece of land owned by two persons. One owns 2-5 and the other the balance. Show their portions.

Fig. 7. The same as Fig. 6.-Set square method. Draw AC at any angle. Step off seven equal divisions on AC. Place the set spuare in a position to join 1: 7. Before moving the set square, place the ruler muder it as shewn. liy sliding the stuare along the ruler, paralle's can lee drawn throngh 6 , 5. 4. 3. 2 and 1 , dividing Als into 7 equal parts.

Fig. 8. To construct an equilateral triansle on a giten buse. Witl $A$ and $B$ as centres and radius $A l$; fescribe arcs cutting at ( $:$ Join $A(\%$ and I:C.
By applying the set square slow that the triangle is also equiangular, and that the three angles are together erjual to $180^{\circ}$.

Fig. 9. To inscribe an equilateral triangle in a circle.-1)raw any diameter AB. With B as centre and radius BO ) descrilie are (O) Join AC, CD, and DA.

This exercise may be made the hasis of several designs. For example, if the working be repeated starting from $A$ as centre, we get a six pointed star, a favorite shape for flower gardon plots.

Fig. io. To describe an equiluteral triangle about a gizen circle.-Draw any diameter $\Lambda$ B. With A as centre and radius NO, draw are (OI). With $B, C$ and $D$ as centres and radius CD, draw ares cutting at E, F and G. Join EF, FG and GE

This also forms a good exercise in desigun.
Fig. if. To construct an cquilutcral triangle, giten the eertical height.-1.ct AB be the vertical height. It A constrict angles of $30^{\circ}$ on each side of AB. Through B draw IU' at right angles to AB , to mect AH and AK .

Fig. 12. To construct a rectangle, the diagonal and one side gizen.-Lect AB he the diagonal and C the side. Wisect $A B$ in $O$. With $\cap$ as centre and radius ()I describe a circle. With A and B as centres and $C$ as radius draw ares cutting the circle at D and E on opposite sides of the diagonal. Join $\mathrm{AD}, \mathrm{DB}, \mathrm{BE}$ and AE .

Exercise.-A rectangular field is divided by a fence 200 yards long joining opposite comers. One of the sides is 80 yards long. Complete the drawing of the field.

Fig. I3. To construct a rhombus. side and one angle giten.- L .et $\triangle$ ? be the given side and $C$ the given angle. It $A$ construct an angle equal to $C$. Cut off A1) equal to AB. With $D$ and $B$ as centre: and radins equal to $I P$, draw ares cutting at E . Toin DE and DE. This exercise may be given in the form of ploting out ground, usiing seales as in Fig. 21.

Fig. 14. To construct a rhomboid, tato sides and the included angle giten.-Let AB and C. be the sides and i) the included angle. Construct the same as Fig I3.

Fig. 15. To inscribe a regular uctagon in a giecn circle-Draw ans diancter AB. Draw another (D) at right angles to it. Bisect angles $A O C$ and (Ol). Produce lisecting lines to form diameters IEF and Cill. Ioin AE, EC. CCr, etc. This gives required actagon.

Bxercise 1.-Join every other point IC, $C B$, ete.. to form an cight pointed star.

Exerciee 2.-Inin every third point AG. GD. ete. to form amother shape of star.
lita. 16. To construct a regular octagon on a giate buse--Let AB be the given base. By means of set sumbere, protractor. or compass, make angles of $45^{\circ}$ at $I$ and $B$. Cur off IC and $B D$ each equal 10. 18. Frect limes perpendicular to base from $C$. $\therefore$. li, and D. ('ut off ( E , and D ) F each equal to AB. Jrim EE. At E and F draw EG and FII. making angles of $15^{\circ}$ and cutting the perpendiculars in G anl 11. Inin GH.

Fig i7. To inscribe a regular octagon in a given squarc.-Draw the diagonals AC, BD. With A as centre and $A O$ as radius, draw arc EOF. Similarly at BC and D draw arcs GOH, JOK and LOM. Join GM. EK, LH, and JF, which together with the middle pertion of each side, form the octagon.
lige. 18. To inscribe a circle in, and describe a circlo about a gizon square.-Draw the diagonals AC and BD. From $O$ drop perpendicular $O E$ to side of square. With centre $O$ and radius $O E$ inscribe circle. With centre $O$ and radius OA describe circle.

This exercise and the two following are samples of a number that may be inserted to give practice in the foregoing principles. It will be noted that to get correct results the utmost accuracy is necessary in every detail.

Fig. 19. To inscribe four circles in a square, cach to touch two sides and two other circles.Draw diameters and diagonals. Join FG, GE, EH, and HF. Join LK. With K, L, M, and N as centers and radius KP draw required circles.

Fig. 20. To describe six cqual circles about a gizen circle.-Divide the circumference of the given circle into 6 equal parts, producing the diameters.

With AD as radius and $O$ as centre describe circle GKX1. Where this circle cuts the produced diameters will be the centres of the required circles; the radius to equal AO .

Fig. 21. The construction of plain scales.-This has been placed last for the sake of convenience in arranging the drawings for the plate, but in practice they should be spread over the year's work, so that they may be utilised in any plotting-out problems. Four only are sheyn, but others of similarly casy nature may be taught.

To make a scale of one inch to a foot.-Draw two paralle! lines about 3-16 of an inch apart and divide them by vertical lines into one inch divisions. Divide the left hand incl into twelve equal parts, number them as shewn, the first division from the left always being marked $O$ (zero). The divisions to the right will now represent fect, and those to the left inches, and may be labelled as such. To use this scale. suppose a line three feet five inches is requirad. Stretch the dividers from the third division to the right of O to the fifth to the left. This will give the required length. As this scale gives a drawing 1-12 of the original size, it is said to be a scale of $1-12$ and this fraction is called the 'Representative Fraction.'

The other scales are made in the same way. In the fourth the inch divisions represent yards.

The one on the left is therefore divided into three parts to represent feet, that being the next denomination below yards.

If rulers with sufficient scales to mark the subdivisions of the left hand division be not obtainable, the method of exereise 7 may be adopted.

## Personality of the Teacher.

Personality is what wise employers of teachers try and secure above all else. People with mean matures and small souls never ought to try to teach. Still, personality is greatly capable of cultivation. It is largely an affair of our own making. Five great schools of teachers tried to find a solution of this problem. They were the Epicurean, the Stoic, the Platonic, the Aristotelian and the Christian. Whoever follows the teachings of all these schools will become a popular and successful teather, and anyone defective in a majority of them is unfit to teach.

The Epicurean idea was that one should get at all costs as many pleasures as possible. Teachers should have good foorl, no hurricd meals, a comfortable room in which to be quiet. In the long run these are half the battle. Teachers shonld not deny themselves these. Kestful quict and grood ford are necessary. Next is neerled wholesome exersise. The teacher shut up for five or six hours must have one or two hours under the open sky every school day, care free. The teacher shomld do a lot of outdorr things in vacation and the one who doesn't is falling away even from this low ileal.

The Stoic teaches (me to keep the mind free fom all worry and anxiety; the mental state makes the man. The teacher's troubles can be reduced by reducing the mental worries. The blunders once made should be left behind, not hrosided ower. There is no situation in which we can not be masters, is the Stoic's lesson. Every tereher must sometime learn it. The teacher's life is more full of general discouragements than any other profes sion, but the Stoic formula, failufully applicel in reasonable limits, will overenme them. Teathers ainuld live in care-promf compartments.

Platonism bids us rise aluwe this workd. I'latonists were not the most agrecable people to live with. Much that passes for Christian religiom is simply Platonism in disguise. Sill, it contains some truth that every teacher ought to know and comentinces ap)ply. A ieacher wruld hatrdly kecp his puine without these Platemic resources. but monderation is nex essary.

By the dristotelian selux, man wan the fimt hin
end here and now on earth, not in heaven. Teaching is an extra hazardons profession as far as nervous energy is concerned. The teacher's problem is one of proportion-what to select. What to leave ont. The essentials to the main end onght to be taken, the others left. The teacher must say no to calls good in themselves, but not for themselves. Amateur theatricals, church fairs, dancing and dinner parties, onglit to be taken part in only in great moderation. ( hee service Sunlay is as much as one can well attend, and Sunday schosl teaching is the one thing that the conscientions public schond teacher must rigidly refrain from. I'lysical health and vivacity of spirits must le manatanesl at all costs. Teachers shonld be sure what they do is best for then and then never mind what perple say. Teachors shomid have their own imdividnal ends in view.

The eomsel of the greatest teader remains. Christ says to the teachers to make the interest and aime of cach pupit their own. Where the mo Christian teadher's work ends, the Christian teacher's work legins. Teacher and pupil are engaged in a common work. The attiturle of the Christian teacher is, "come, let's do this work tugether. I'm ready to help you and want you to help me." The un-Christian is unt concerned with the home-life of the pupi's, the Christian teacher knows his pupils and their homes. The success ful teacher hooks forward to the pupil's future. Teathers learn to see with pupils" eges, share their work. rejoice in their success, be more sorve than they at their failures. lead them, never drive.. Iny tather whe can combine the five qualitics I have mentioned will find teachings a pleasure and achieve sucecs.-. Ibstract of Address by President W'illiam Dellitt IIyde, in A'ze Eork School Iompal.

There is probably me combry in the word where nature has heen more lavish in the stores of fertility prowided in the sal, of where the lame has greater (apacity for the production of foon for mankinal than (anala. Whike the resurteres of the I mamion in its minerals, its forests and its fishories are very sreat, it is in the suif that the sereater wealth of the country fies. The immensity of the atea of iertike

 and but a bery small propurtion of the abathe land hat yot been brought under coltivation.--l) . If 'm.


Thne will man saill to the yoms man: ". Ny som. I have hanlaterat man haral thas in me life, and mast of them didu't hatpen."

## Manners the Morals of the Heart.

By Mrs. C. M. Condon.

In the Victorian era, among the items in the bills rendered from Ladies' schools, was always one set down to "Deportment." Great stress was laid upon training and instruction in this subject, which embraced table manners; behaviour at church, on the strect, and other places of public resort. It also preseribed the different forms of salutation according to the rank, age or position of the person saluted; the correct method of entering and leaving a room; also the art of entering and alighting gracefully from a carriage, to which was frequently added equestrian practice and etiquette at a good riding school. Special pains were taken with the different curtsics, made by the ladies, from the simpler forms, up to the three sweeping reverences made to Her Majesty on presentation at Court.

Sometimes with narrow-minded people, there was an unbending adherence to rules that degenerated into an ungraceful formality ; but, on the whole, this careful training in the minutire of social convention fully justified itsclf.

The mother of on1r late beloved Qucen, the Duchess of Kent, was the careful trainer of the young Princess in a high-bred courtesy, at once simple and sincere.
At her coromation Victoria beautifully exemplified her exguisite courtesy. Lord Rolles, a very aged peer, when about to swear fealty to the Sovereign, stumbled on the steps of the dais; instantly the young Qucen rose and extended a helping hand to the feeble old man, involuntarily shewing that respect for old age which was a strong point in the teaching of the day.

There was, mudoultedly, at times undue repression of youtliful spirits, and when out of range of the eyes of authority mature asserted itself, and manners might not then be so commendable. But no greater tribute can be paid to the training, as a whole, than the delightful manners of some of the best specimens of those whose parents paid for this item of "Deportment."

One who loves chitdren cannot but be glad that they have so much freedom and soope for expression of their individuality; one camot but regret when frecemm dexencrates into a lieense that ignores the just chams of age and authority to respect and comitesy. It is to be feared that the present ate is mot strons in reverence, and the sentle manners that spring from that great quality. Many canses contribute to this: the rush and hurry
of daily life, the keen competition, the insatiable curiosity to which nothing is sacred, especially if its objects are raiscd somewhat above the level, either in rank or fortune.

Even the press, unmindful of its high mission, as the guide of public opinion, sometimes sets a bad example, by indulging in reckless statement, attacking personal character, and dragging into unscemly publicity incidents which have no real bearing on the point at issue, simply to mortify and wound an opponent. Criticism is necessary, but it gains in point and effectiveness when it disdains personalitics and deals only with the merits of the question, in a spirit of fairness and good will.

But laying aside the consideration of those merely conventional rules, necessary to the smooth working of social intercourse, let us sce what are the principles that will always secure good manners if reduced to practice. We may as well place, first, a profound reverence for man as man, made in the image of the Creator, a reverence quite irrespective of all accidents of birth or fortune. If parents, teachers and all who are in. authority will heartily recognize this supreme fact, it will revolutionize mamers and clevate the whole tone of society. Then there must be recognition of the fact that every one has a right, not dependent upon our moods and feelings, to fair and civil treatment.
How many parents and teachers, to the great detriment of the children, make sickness, pressure of business, and every disagrceable happening, an excuse for ungentle behaviour, and even for positive discourtesy.
How greatly children, even babies, suffer in this uncongenial atmosphere is well known to the sympathetic observer. As the practice of this infraction of the rules of good manners in generally confined to children and inferiors, it is as mean as it is immoral. A great aid to agreeable manners will be found in that intelligent sympathy which springs from the head as well as the heart, and finds in the limitations of the individual, nay, even in his very depravity, such a strong appeal for help, that self sinks out of sight, and the morals of a generons heart shows itself in perfect manners.

The rcfinement and grace of Elizabeth Fry won insensibly upon the hardened criminals of Newgate, and influenced them to listen to her prayers and preaching; for who could be obdurate in a presence so swcet and genial?

Another help to good manners will be secured by the determination to cultivate, as a matter of duty.
cheerfulness and good humor, and under no circumstances of personal discomfort, to look sullen, or impleasant, to speak with unbecoming harshness, or to treat an offender with contempt, or wither him with sarcasm.

Let our teachers ponder seriously this question in regard to the children whom they have, for the larger part in their waking hours, under their care. The hurry and drive of our daily life, keen competition, frec discussion of ptiblic affairs, and the too free and easy manner of speaking of those in authority, are not marks of that grood breeding which gives honor to whom honor is due. Jurlicious and temperate criticism is the right of every citizen, but a becoming reticence shouk be observed in the presence of children and immature youth, whose manners will not be improved by invective, often crude and ill-considered, against "the powers that be."
Some formal instruction in what constitutes good manner should be given by the teacher, but the repose, the self-restraint and the charm of gexelbreeding, may be best illustrated in the behaviour of the teacher himself. Set before pupils good models, and what better than that of the Divine man whene manners were so perfect that a medieval chronicler quaintly speaks of him as "That gentleman Jesus." The courtesy, too of "the great $A$ postle" was so inbred that in the most trying circminstances it never forsook him.
Let not teachers imagine that an antocratic, repellent manner is an aicl to discipline: on the contrary, it arouses opposition in the bokl, and sor owercows the timid that they canot do and lee at their best.
"Good manners make the man," says William of Wykeham; he uses the worl "make" as npposed to " mar" (spoil), and as he was a man of affairs he spoke from a wirle experience, plainly secing that good mamers build tup eharacter, ant also help to make the suceess of the man in the practical business of life.

Out of D.wakr.-I It. Whipple, long Bishop oi Minnesota, was about to hold religrious services near an Indian village in one of the Wectern states, and before going to the phace of meeting asked the chief who was his host whether it was safe for him to leave his effects unguarded in the loulge. "Indenty safe," gromtel the red man. "No white man in a hundred miles from liere."-Woman's Home (ompanion.

## Girls I Have Known.

The liveliest girl I ever met Was charming Annic Mation; Exceeding sweet was Carry Mel; Helpful Amclia Ration.
Nicer than Jennic Rosity It would be hard to find; Lovely was Rhoda Dendron, too, One of the flower kind.
I did not fancy Polly Gon, Too angular was she;
And I could never take at all To Amnie Mosity.
I rather liked Miss Sarah Nade, Her voice was full of charm; llester ical too nervous was, She filled me with alarm.
E. Lucy Date was elcar of face, ller skin was like a shell; Miss Ella Gant was ralleer nice, Though she was awiul swell.
A clinging girl was Jessie Mine, I asked her me to marry,
In vain-how life is fall of rights, For Ler joined to Miltic Pary. - Boston Transcript.

## Hand Work in a Country School.

At a country institute this summer I saw displayed a collection of execellent hand-work done by the clitdren of a rural school. The paper-cutting and raffia work-mats, baskets, holders, and other conventional pieces-were as well done as the products that I have seen of many city schools; in fact, some of the raffia pieces will bear comparison with the best. Upon enduiry I formd that the teacher who had accomplished all this is a young man-a yonng man, moreover, who has himself had no training in manual work, learning all that he knows of the suh)ject by olserving several classes at a state normal school last summer. Being further interested at this, I fomm that he had bought the necessary materials himself, at a cost of $\$ 3.75$ for the raffia and of forty cents for the colored paper; and that the children had done the work altogether outside scheoll hours, lefore sechool, and at recess on rainy days, with the exception of the smallest children who were permitterl to use this as seat work. Athourg the teacher conducted this mamal traming merely for its educational value in the school, it is interesting to kinw that for next year he las the lest paying comentry schoml in this conuty.-Thomas If. Rrigras. (harleston, Jllinois.

## Memorable Days in January.

Miss Eleanor Robinson.

[It is proposed to publish in each issue under the aparopriate heading an article dealing with the days of the month that are celebrated in tradition, in literature and in art. Our readers will be glad to know that Miss Rolinson, whose writings on English laterature have he'ped so many readers of the Review, will have charge of this department. Emtor.]

## January 6th Epiphany, or Twelfth Day.

This day has always been closely associated with Christmas Day, and the Armenian Christians still keep Christmas on January Gth. The word Epiphany means an apporance, or manifcstation, and since the fourth century the special event commenorated on this day has been the manifestation of Christ to the wise men from the East, as narrated in the second chapter of St. Natthew's Gospel. Tradition, probably influenced by such passages as Ps. 72 : 10, and Isaiah $60: 6$, has called the wise men Kings, and declared them to be three in number. The names usually given to them are Melchior. Dalthazar and (iaspar. In pictures they are generally represented, respectively, as an old man, a man in the prime of life, and a youth. The significance attached to the gifts is expressed in the words of the well-known hymn:

> "Sacred gifts of mystic meaning, Incense doth their God disclos:, Gold the King of Kings proctaimsth. Myrrh His sepulchre foreshows."

The adoratum of the wise men has been the subject of many beantiful pictures. Reproductions of some of these are to be found in Farrar's "Life of Christ in Art." An old legend says that the star, on its first appearance tor the wise man, hat the form of a radiant child bearing a sceptre or a cross, and in some car'y Italian paintings it is so depieted.

An interesting memorial of the offerings of the three kings is kept ip in lingend ly our sovereigns. who stil. on this diay, mate an offering of good. frankincense and myrrl at the (lapel Royal in the D'alace of St. James. (ieroge 111 was the last king who offered these in persme and the presentation is mow matle by an officer of the royal haselond.

* 1n the day of Kins. Nirvel at las wats mate with relation to holiday . $b$ virlue of which the twehe dies after the Nativity of our Savomr wore made ic, tivals, "Cobllor's Dertesiustical Mistoms.

The whole twelve hats sembto hate leen devoted to feastinge and jollity. The weial costoms varied in differont parts. lat $a^{1} 1$ showed some reference

to have a Twelfth cake, rich with spices, which contained a bean. Whoever drew the bean was made King or Oueen for the evening. (Other characters, such as maids of honor, lord clancellor, courtiers, etc., were assigned by lot, and each person was required to act his or her part throughout the feast. In later times, these games seem to have come down to children. Thackeray, in his preface to that delightful children's story, "The Rose and the Ring," refers to them as follows:
"It happened that the undersigned spent the last Christmas season in a foreign city, where there were many English children. In that city, if you wanted to give a child's party, you could not even get a magic-lantern, or buy Twelfth-Night characters-those funny painted pictures of the King, the Queen, the Lover, the Lady, the Dandy, the Captain, and so on-with which our young ones are wont to recreate themselves at this festive time."

So the great novelist, who loved children, himself drew a set of Twelfth-Night characters, and then composed a story about them to amuse the litt'e people.

## January 21st - St. Agnes Day.

In the year 306 A. D., there was a terrible persecution of the Christians under the Emperor Diocletian, and among many other martyrs there perished a bcautiful young girl named Agnes. The story is that the son of an important Roman official loved her and wished to marry her; she refused, saying that she would not marry anyone as her affeetions were set on heavenly things. She was then asked to offer incense to the Roman gods, and when she refused she was put to death. Eight days afterwards. her parents going to lament and pray at her tomb, saw a vision of angels and their daughter standing among them, with a snow white lamb by her side. In pictures she is often represented with a lamb beside her, and she is always held up as an example of innocence and constanc:

It used to be the custom in different parts of England for girls to go to bed fasting and silent on St. Agnes' Ere, in the belief that they would see their finture husbands. The following lines have been hanfed down in the comty of Durham:

> "Fair St. Agnes, play thy part. And send to me my own sweetheart, Not in his best or worst array, But in the chothes he wears ceery day. "Hhat to-morrow I may him ken From among all other men."

Two great English poets. Keats and Temyson. hate made use of this tradition in poetry. The fommer, in his famons prem, St, Ignes' Eie tells
the story of how "ages long ago." the two lovers, Madeleine and Porplyyo. Hed away on one stormy St. Agnes' Eve, after Madeleine had tried the spell.

The epening lines of the poem are a fine description of the cold of the Jamuary night:
> "St. Agnes" Eve!-ah, litter chill it was!
> The owt, for all his feathers, wats a-to'd: The hare limped trembling through the frozen grats. And silent was the flock in woolly fold."

In Temyson's "st. Vgnes," the speaker is a mun, who also seeks to have a "visom of telight." but her thoughts are not of any earthly love, and through faith and prater she wins a vision of the Heavenly Bridegroom.

## January 25th - St. Paul's Day.

This day has been wherved since the 12 th century in commemoration of the conversion of st, l'atul. For some mantown reason, it is considered to foreshow the weather and cevents for the whole year. "If it be a fair day, it will be a pleasant year: if it be windy, there will be wats: if it lee clendy, it doth foreshadow the plague that year." . Ind nearly the same prediction is found in verse:
" If St. Paul's day be fair and clear, It doth betide a happy year; But if it clance to snow or rath. Then will be dear all kinds of grain; If clouds or mist do dirk the skic, Great store of birds or beants shall die; And if the winds do tly aloft. Then wars shall vex the kingdom oit."
The well known superstition aloont the effect of rain on St. Swithin's Day, may be compared with these prognostications. lint the jow (aty, writing in 1715. says:
"Let no such valgar tales delathe thy mind:
Nor F'anl nor Swithin rute the cloud, :and wind!"
Even in wormote a period ats 2.0 on years ago in the Jewish schous, a teacher wat appeinted for every twenty-five pupils, and when the manber reached forty an assistant-teather was given. Here are the otualifications which the Talund says at teacher shou!d persess: He-the teacher-shenkl be show to anger, comerons in his language, iree from comceit, loving criticism and mot exalted by his Lomsledge, sedate in sthdy, widely obsertant, catiser ". extend kwowlenge and to make enhers learn; abowe all, he most be (fod-fearing and free irmm worldy ambition. Thuse requirements ansl gralifieation won!d wot be out of harnme with the yeat wro. Western School Journal.

## A Little Known Waterfall.

To the Educational Reation:
Dear Sir,-While reading " ()ur Waterfalls" in the November Review, a wish canle to me that I conld give an adergute description of the falls in a little brook which empties into the Southwest Miramichi, abont sisteen miles above boiestown, N. B.

1 was up this river on a fishing trip with some friends during jast summer's vacation. When we cance to the mouth of the brook called Fall Brook, we left the loats on the shore and walked up alonge the side of the brook about cighty rods to the falls. Those of 14 who had never been there were not expecting to see moth, as all the sign of a brook that we couled see at the month was a little water, (rickling between some large rocks, the water being down to the summer alepth. But the fall was magnilicent: the water comes over a perpendicular wall which we were toll is ninety-five feet high. At the top, a shelf of rock projects out about four feet, and the water pours down over this shelf in a thin sheet. The straight wall is from ten tor twelve feet wide, and the rocks curve around it on each side like the walls of a cave. When the spring freshets oceur. the water also pours wer the curving sides. The conld see the marks where it had been, and the men who had seen it in the spring tokl as of the volume of water that pours down when the stream is full. The pool at the fall was alive with trout.

> Marg(tikite Marle Norr.mb.

Taymouth, N. 1., 1)ec. 12, 1yot.

The first thing to do in the stury of English literature is to read it incelligently, to hear the very voice of it speaking to the directly and without impertiment, to make its thonght pitss thromgh the minds of these who creates it, to make its thengith our thenglut. There mun be no half howletge. no vague comepts. The words of it shanded men conver haty motions. If we are to know the full foree of it wemust know that the words that the author cluse were the only ones that he could have chensen. The turns of exprestion must be happer ones. fitting the thenght like a glove. It is the perfectuess of form that make it literature and given it a clam to our attention.

Withom a historical kinwledge of ont langulye. shell at int apporciation of much of nur best literatture is impersible. (riticism with the best of inten-
 what it lachs of such kionlodge.

## Murderous Millinery.

Do you ne'er think what wondrous beings these? Do you ne'er think who made them and who taught The dialeet they speak, where melodies Alone are the interpreters of thought?
-Longfelloz-Tales of a Wayside Inn.

One of the most pitiful sights in London is the sale of thousands of birds of paradise, humming birds, parrots, owls, terns, kingfishers, finches, swallows, crown-pigeons, tanager, cardinals, golden orioles, and other bright tropical creatures, besides hundreds of packages of the long, loose, waving "osprey" plumes taken from the backs of varions species of small white herons and egrets. Last year, in London alone, to give only two conspicuous instances, the feathers of 150,000 herons and egrets were sold, and over 40,000 birds of paradise.

Steadily, year after year, this appalling waste of bird-life goes on, not for the purpose of food or warmtl, or any wise economic reason, but solely to minister to a "fashion" in millinery that consists in the wearing by women in their bonnets and hats of the dead and mutilated bodies of one or more birds. The very existence of the beautiful bird of paradise is endangered so that a faslionable woman may flaunt from toque or picture-hat a bunch of its plumes. The most beautifut and wonderful species are rapielly being exterminated, many are on the verge of extinction, whilst others have entirely disappeared. In our own comtry some thirty species of Britisln birds are named by Mr. W. H. Hudson, a noted authority, as either having been extirpated or in a fair way of beconing so in recent years.

The trader, who waxes fat on this infamons trade, and the feathered woman, vain and heedless, or ignorant and thoughtless, as the case may be, are jointly responsible for this state of affairs. The fashion of wearing birds and their plumage is in itself indefensibly cruel. Nothing can excuse the wanton destruction and the wearing of any bird, not killed for the purpose of food, other than the ostrich, which slieds its feathers naturally. Every lover of nature, every person of humane fecling, every thinking woman, once she knows the facts, must regard this traffic as infamous. It is hardly credible that any woman who once realizes how and when an "osprey" is procured could bring herself to wear onc. It cammot be too often repeated, or too widely known, that to secure these graceful plumes not only is there wholesate slanghter of the adult birds, buit, as these feathers are worn ly the white herms and egrets during the breeding season mone: and by both sexes, their death ensures that
of thousands of young by the most horrible of fates -that of slow starvation. These "nesting" plumes then, are the outward and visible sign of man's inhumanity and woman's criminal ignorance and, alas! heedless vanity and indifference to cruelty.

The late Qucen Victoria was so impressed by the knowledge of these facts when they were brought to her notice that an order was issued for the substitution of ostrich plumes for the "ospreys" then worn in the head-dress of officers in certain regiments of the army. The present Queen also desires it to be known that she never wears osprey feathers herself and discountenaces their use whenever possible. Many ladies of high degree, including the Duchesses of Portland, Northumberland and Somersct, are avowed enemies of the fashion, and there is hope that, with wider knowledge of the cruelties practised in securing these plumes, the good taste of the vast majority of women will become apparent and they will cease to be parties to it.

The only hope of stamping out this fashion lies in the forec of public opinion. Once let it be maderstood that it is "bad form" to wear dead birds, or portions of them, and particularly ospreys, on one's person, even only from the æsthetic point of view, then there is a chance of this horrible fashion dying ont. The men must help by forwarding wise !egislation on the subject of the protection of birds, and by constant supervision of the millinery of their feminine belongings; but it is to the women themselves we must look for any real result. If women decided that feathers should not be worn, always excepting the ostrich feather, they would soon cease to be worn. All honor to the women who refuse to wear them-and they are many-and thus lift a little of the reproach that sits so hardly on the socalled gentle sex.-The Speaker, London.
"Picking" at pupils-telling them to "sit up," "to keep quiet," "to study,"-does little or no good. In a short time the disregard for the oft repeated injunction is seen in increased restlessness and disorder. When pupils learn that the injunction is only formal-a sort of habit-they do not even hear it, for pupits hear only what has meaning. The remedy is in the teacher-in the recitation. Get the pupils to work, and there will be little use for phrases which only irritate. Or, stop the recitation, say nothing, and stand still matil the room is quict. Stop the work of the school whenever necessary to give meaning to your general regulations. A teacher who cannot command and maintain order is a failure--Patrick's Pclagogical Pebbles.

## Naturai History Stories for Little Folks.

## The Little Fawn.

The fawn was born in a quiet valley in the great forest, and where the bushes grew thickest he had his nursery. Here his mother, the doe, found for him a soft bed of moss and dried leaves and fed him on milk.

He was the prettiest little creature, with his brown fur coat dappled with white, and his little slim legs which were still so weak that he could hardly stand on them, and could only take a few feeble steps at a time. Before the doe left the cover to look for her food in the forest glen, and to drink a fresh draught at the brook, she pushed him gently down upon the soft moss bed with her muzzle, and made hin understand that he must lie there obediently till she came back, so that she might be sure of finding him again in the midst of the great forest. After a few days his legs became a little stronger, and he tried some pretty gambols, but he was not nearly strong enough yet to gallop, with his mother over hill and dale, and to jump over bushes and ditches.

Some children came into the forest one day to hunt for berries, and men and women came close to the eover to gather woot. When the doe saw them she stamperl her fore-leg, and the fawn instantly understoorl that this was an order for him to lie down and hide under the leaves and high bracken. When the children and wool-gatherers saw the mother deer they ran after her. At first she trotted on slowly a little way ahearl of them, at times, even stopping a moment, pretending to be lame and unable to run fast, and all the while the people followed her she was leading them further and further away from her litt!e fawn in the cover. At last, when she thought all danger of their finding him was over, she trotted along guicker, so that the peop.e som lost sight of her in the thicket. Then, choosing a roumd-alout path, sloe returned to her little one, and found that the fawn, meanwhile, had been obedient in his mother's teaching, hat lain absolutely still in the same spot, and his olvedience had saved him from diseovery. So you see it was best for the fawn to obey his mother without questioning, and of course a child sloould don so ton. for it should be at least as sensible as a little fawn.

## The Crow as a Gardener.

Jim, the brack crow, las long been the fatorite of exerybuly in the bouse, and as som at the
children are out of bed they can hear him croaking his "good morning" to them. He knows quite well that they will throw him bits of bread from the breakfast table.

But the children have often had to scold their black friend for carrying off bright bits of stuff from the girls and glistening trifles from the boys, which he hides away under the tiles of the roof or in some dark corner. He came to be called a "rascally thief," and deserved the title, but, after all, this very love of prying into hidden corners and his trick of hidling things are useful at times.

Near the house is the kitchen garden, and behind this lies the beceh-wood, and this is where Naster Crow likes to be. At night there come crawling from the woods crowds of snails, making shiny tracks towards the vegetable berls. As long as the wet dew is lying the little gluttons eat one leaf after another, but before the sun rises and dries their tracks they are hidden away again. Some stick to the under side of the large cabbage leaves, others hide themselves in the shadow of the hedge behind stones and moss, or between the thickly plaited branches. They have withelrawn into their hard shells and think themselves safe, but here comes Master Crow, and with his beak he seizes one by one. He carries them off to a big stone, and against it he knocks the hard shel's till the splinters fly about, ancl then he grobbles up the juicy snail inside. And so, like a carfeul gardener that he is, he draws ont one thief after another from its hiding place, and in a few days there is quite a heap of broken suail shel!s all round the stone.
lesicies smails, the crow will also hunt for worms and mice, and so, filling his own beak, he destroys many vermin that spoil the useful plants of the garden.

## Tea.

The weather was rainy and cold, but we sat by the coss fire, and were delighted when mother ordered tea to warm and cheer us, and while we drank it she tokl us where it came from.

Far away in China, where gold-fish and golden pheasants live and camelias grow in the hedges like the briar-rose does at home. it is hoot, and the peasants till the gromed by the sweat of their brows. In the val'eys they sow rice and entton, but on the shones of the liills they plant tea. The ground is duy deep and well manmed, and the seeds of the tea plant are then sown and coverel with earth. Firm the seets grow little shanis, from which the plant-
ers loreak off the middle shoot, that the plant may not grow up too tall, but spread out into abundant branches round the stem.

As soon as the tea shrub) is three years old the leaves are picked off, and this is clone twice, and in very fruitful places, even three times a-year. The most delicate leart leaves from the points of the branches are sorted from the rest, and from these you get the finest and most delicate tea. The next best leaves are again put together, and the lowest, o!dest, and hardest leaves give a third kind, the coarsest and cheapest sort.

The tea leaves are first dried in the sum, and then heated in iron candrons over a slow fire and kneaded with the hands. They are rolled and finally dried, whilst to some sorts of tea the Chinese add the sweet-smelling blossoms of different flowers. Finally, the leaves are packed in stone jars, in tin boxes, or in well-sealed cases.

The Chinese use a great deal of tea themselves, for in China everyone drinks tea, from the Emperor himself to the meanest beggar, but mate withont sugar or milk, with water only. What they do not keep for themselves they se! to the merchants, who bring it to us in England ancl other comntries of the world.

The tea plant also bears pretty white blossoms that look almost like little white roses, and timn into brown, dry, fruit capsules with dark secds.

The Chinese value their tea plant very highly, for, although they can use neither its blossoms nor its fruit, they praise it becanse of its precious leaves.

- RICU.ARJ MTAGNER.


## Spelling Reform.

A most imposing document las come to hand this week urging the newspapers published in Toronto to reform their spellins, and the petition is signed by nearly one hunclred professors and lecturers in the L'niversity, high and phblic schools and business colleges. It is no small tribute th the press that all these anthorities on erlucation shonk make their appeal to the newspaj)ers (konn tomen, rather than to each other. for they write our text-bonks, they control onr institutions of lamming. and if the erlitors and reporters mis-spell the worls they write. these are the men whominder them. mistangit them, hammered erome into theme when they wore gonng atnel leepters. and wonld lotere taken to "fonetile

 Whe, may he sate tw have nearly fo,ooo sclues chitalren in this city at his merey. Little bugs and
girls after their first lesson in spelling, return to their homes sputtering, contorting their countenances and coughing up sounds from their tender interiors in a manner that has alarmed many a mother. To see a child in the throes of spelling a word looks more like the symptoms of a fit than a first step in learning. The little one is tanght to spell a word by somd, rather than by sight, as for instance, "cat" is "keh-ah-teh," and these sounds are produced by using a part of the throat that the child will ultimately employ only in swallowing food or in gargling when ill. After a year the child is taken to one side and told that it was all a hoax, and he learns that you can spell cat "c-a-t," as the housemaid contended from the first. It is rather odd that our authoritics on education who can of their own accord, introduce a system like this, should feel compelled to appeal to the press in any thing. They suggest that silent letters be dropped, although silent letters, like silent persons, are often more wortly than their noisier companions. This journal will be slow to adopt dehorned spelling. Having learned to spell correctly, we do not propose to lightly abanclon this advantage over many of our contributors.-Toronto Saturday Night.

## An Unfortunate Statement.

Dr. Wm. T. Harris, U. S. Commissioner of Education, stated in a signed article recently, that in discussing the salary question in this country we should not take into account those who receive less than \$500 a year, as "they are make-shift teachers," have not prepared themselves for teaching, and are not studying to advance themselves, but go from school to school as opportunity offers.

Dr. Harris has certainly overshot the mark this time. 'There are thonsands of excellent teachers, and many of them well-schooled and trained, who are receiving less than $\$ 500$ a year, and who will contime to receive no more if they are to have no more enconrasement than this, and if the people they serve are to be told that their teachers are only. make-shift teachers, anyhow.

On the other hand, there are teachers who receive $\$ 500$, yes $\$ 1,000$ a year, who are poorer make-shifts that many of these noble women who are scrving their state nobly and conscientionsly for less than $\$ 500-y$ yes, less than \$300 in many cases. The poor teaching is not all done in the "little red schoolhomse on the hinl." Oh, no! Some of the deadest. dryest, most maskifled and mupedagosical teaching to he fonnd anywhere is to be seen in schools where the teacher receives more than $\$ 500$ a year.-Ohio Teacher.

## Hints for: Studying a Play.

BY REV. THOMAS MACADAM, OCEEREC.
I.-The Story.

Be prepared to give:
1.-A sketch of the author's life and charater.
2.-A concise ant clear narrative of the events in the play.

3--The construction of the Play-nmmber and subjects of Acts and Scenes, object of prologue and epilogue : a full narrative of the events if any Act or Scenc that might be asked.
4.- I list of the Dramatis Personze their reation to eath other, and the part played lyy eadh.
5.-A description of the general plan, main plot, sth-plots. and special incidents.
6.-The different kinds of Dramatic literature and the class to which the platy levongs.
7.-Sources, date, and history of this play.
8.-Names and dates of his other plays.

1I.-The Linglage.
1.-Note peculiarities in words, phrames, flonms and grammar.
2.-Give etymologies of word with :13 intcreting hiolory:
3.-Note atny specially felicimon. words. epithets wo phrases.
4.-Note and name all the chicef figures of sperche cattployed; note also adiges. provicros, maxims introduced.
5.-Be prepared to sean any line, to name the metre and point ont metrical peculiarities or faults; state the kind of poctsy and of stanza to which any paccitg belongs.
6.-Give a list of intachronisms in the plisy (if there are such).
7.-Note and explain all allusions to event or persons (a) of the Author's time, (b) of llistory, ( $c$ ) oi Jythology, ( $d$ ) of literature ; also allanfonc 20 pernlar beliefs or traditions, or atsages.
8.-Quote lines or pascages illustrating ceath of the printalmese mentioned.
 phrase, or passage that may be siven.
10.- Be frepared to can atyy line.

If.-Pe prepared to apply the right woul or equthet, when asked.
12.-Be prepared to note all the Saxon, Jatim, or other foreign worts in a pasinge of. say, son linea int length.
III Dramatis l'frsusis.
8.-Individualize cath (haracter by deacribing hin, or hor. function (real or inagined). personal apporather. mental and moral qualities, siew of $1 \cdot \mathrm{fe}$ and mond. contrast and resemblances with other rharacter of this or other plays, social position. style of
 quotation.
2 -Show the hivtoricil accurates: otherwist of the portrayal of any historic chatacters (whedher the character in trase to history. Whether at furigene: or anciont is marle to sprak and act like an lanc livbmatr enf the aththor's elay, čte)
3.-Show originality or otherwise of the conceptions of ally
character; whether true for nature, and suited to the situation.
IV.-The duthor and fis Times.

Show with the aid of quotation what the Play reveals, either directly or indirectly, regarding the . Nuthor in respect of:
I.-Age at time of writing, edacation, worldy position, tone of social surroundings and formative influences.
2.-His attitude towards religion; wholesomeness of moral tone; his general view of life and men: his character generally: love of nature, of truth, of books; estimation of wonnen; and relation to the great, to the oppressed or $1,00 r$.
3.-His knowledge of hmman nature.
f-Whe kind of theme that appears most to interest him.
5.- Yhe breakth and varicty of his sympathics.
6.-lloe subjects that show him at his max'mum, and at his minimum of casy strong mowement, or of dianty gracefulness.
\%-Lhe compats of hic power. versatility, range of general knowleage.
E-The bout wf his genius-to the sulbime (as Milton). (t) the hamotons, ludicrous, hopefal, gloomy, ete.
()- -1 is own sentiments put into the monthes of his characters; power of imagining. by intellectual symbathy. sentiments mot his own, l:ut sulable to the situation of his characters.
10.-Compare his language and style with that of the time in which he lived.
11.- Estimate his influene: on English style, and on the Drama.
12.-Fxplain the Dramatic L'nities, and show how far he conforms to them.
13.-Observe whether his nrexabling habit of mind is objective or subjective.
B. f - Note passages rating light on the manners, usages, ete.. of the different ditsiew of suciety in his time.
V--Quotitios.
J.- Pe able to qutote, when asherl. what any character siys to amother any specilied occasion.
2.-Qunte passages containing ideas or language apparemtly borrowed from other writers, with the colnterpart passages.
3. Qunte from the samm anthor, wr other writers, passages illu-trating the thought or dituation in any parts of the play.
4.- (2thte all the weak passatres and point ont their defects.
5. Wunte the hest parsages of this Play in single lines. complets and larger sections, aming at varicty of setotiment and literary form, sily 1 (oo lines in all.
6-Print wht wherein the evellence of teme of these pas-
 pathos, Immour, sublimity, focling. brightness, in-

T. Ontute pasmees cinting light on the life amd mammers of the anthor's time.
 or anty utler matter wi interest.
9) Untote all the expresinth in thi- laty that hatue combe itto every-rlay use.

## Children and Poetry.

The late Horace E. Scudder-who said many wise things on education-in an article on The Primer and Literature, remarked: "Of all the literary forms at the service of the teacher who wishes to lead the child by natural ways into the richest pasturage, verse must be given the precedence in time at least."

Its melocly, its swing, its rhymes, its brief lines, its form, as distinct from ordinary speceh, all appeal to the youngest child and awaken his interest, and if we look at the matter a little more deeply we shall see that the young human being is attracted by all these things just as man was attracted in the childhood of the world, for in the history of literature, poetry invariably precedes prose. To repeat rhymes to the baby, rhymes for his fingers, rhymes for his toes, rhymes for his little snub nose, his red buttoned up mouth, his shell-like ears, his wide, wondering eyes, is natural for every natural mother, and never yet was baby known to fail in delighted response. Nor ever yet was seen the little child who did not feel the charm of Mother Goose's melodies, the begining of juvenile literature, lyrics which have survived because they were fitted to survive.

So far most of us go in the training of children, but here, when a few more steps would bring us over the threshold and into the domain of real poetry -here we frecuently stop, and largely because we are ignorant of what to do next. Yet the task is easy now, while later on it becomes in many cases a burden we can scarcely lift. "Once let genuine poetry possess a child," says Mr. Scudder again, "and the hardness of later life will not wholly efface its power; but let the cultivation of the love of poetry come late and it comes hard."

Why, then, says the practical parent whose eye has never rested on a line of verse since he read of the lamentable adventures of Tom, the Piper's Son -why, then, insist upon teaching pocetry at all. since it scems to be a juvenile taste, outgrown like a love for hobby horses and mud pies

Because, in the first place, to be equally practical and yet sublime, "Poetry is the real and true state of man; the proper and last ideal of souls, the free beauty they long for, and the rhytlmic flow of that universal play in which all life would live." This, in general, and as a preface to the detailed reasons, which are all simple enough.

First, we must cultivate a love of poetry in the chi'd because it is the smoothest, most secluctive
pathway to literature-to great literature, to that in which is crystallized the hopes, the fears, the loves, the struggles, the conquests, the ideals of the race. A narrow pathway, you say, which begins with, "This little pig went to market," and "Pussy in the well!" A narrow one, indeed, we answer, but how wide is the artery that leads to the heart, out of which are the issues of life?

Second, familiarity with poetry is an invaluable aid to the use of good English, for it accustoms the child to beautiful words, beautifully set. The poet necessarily uses artistic language; that is, "words chosen for their clearness, force and beauty, as vehicles for the communication of conceptions and emotions." The parrot easily acquires a forcible vocabularly, you know, if he lives in suitable surroundings, and even the canary can learn to sing a tune if he hears it often enough. Let the child hear and read good poetry daily as a part of education, and you shall see how his diction shall gain in strengtl and beauty.

Third, poetry is of supreme worth in the cultivation of the imagination, and the children of this country especially need food for this faculty in the midst of all the practical tendencies of the times.Nora Archibald Smith, in Congregationalist.

## There are Other Instances.

Little Johnny Sleepryead was spending his vacation with his grandpa. One night grandpa heard a thud in the direction of Johmy's sleeping room. "What's the matter?" said the solicitons grandpa. "I jist—jist felled out of bed," was the reply. "Well, why did you fall out of bed, my little man?" "Dunno, 'less I went to sleep too near where I got in," was the significant reply.

Going to sleep, too near where one gets in, is a dangerous malady, and is contagious among teachers. There are many who are immune to it. but the onslaughts of the disease are noticeable among teachers who could easily become immune if they would take the treatment. The raccine consists of a liberal injection of professional zeal, applied early in the development of the young teacher. Teachers of much experience often forget that age alone is not a safeguard against the disease. "Going to sleep too near where one gets in" in not so much of a youngster's disease as one of early maturity-too carly.

Those teachers who have gone to sleep too near where they got into the profession are pretty hard to arouse even by a thump occasioned by falling out
of the band wagon. You occasionally meet such a teacher, and he is usually rubbing his eyes, sometimes his fists, and declaring that there has been unjust discrimination against him in throwing him overboard. While he stands and rails at the youngsters who crowded him out with diplomas in their hands, the whole procession moves on, leaving him to entertain himself with the echoes of his solitary complaints.

Young friend, be careful lest yout fall into the slumber of self-satisfaction too near your entrance into the teaching profession.-The Ohio Teacher.

## If You Are Lost.

Find a mature tree that stands apart from its fellows. Even if it is only slightly separated it will do. The bark of this tree will be harder, drier, and lighter in color on the south side. On the north it will be darker, and often at the ronts of it will have a clump of mould or moss. On the soutls side of all ewergreen trees, gum, which oozes from wounds or knot-holes, will he hard and amber-colored. On the north, this gum is softer, gets covered with dust, and is of a dirty grey. In fall or winter, trees which show a rough bark will have nests of insects in the crevices on the soutl.

A tree which stands in the open land will have its larger limbs and rougher bark on the south side. Hardwood trees-the oak, the ash, chms, hickories, mesquits, and so forth-have moss and monkl on the north. Leaves are smaller, tougher, lighter in color and with darker weins on the south. (In the north, they are longer, of darker green, and with lighter veins. Spiders build on the north side. Any sawn or cut stump will give you the compass points, because the concentric rings are thicker on the sonth side. The heart of the stump is thus nearer to the north side. All these things are the effects of the sun. Stones are bare on the south side. and if they have moss at all it will be on the north. At best, on the sumy side only a thin covering of harsh, lalf-dry moss will be found. On the somth side of a hill the ground is more noisy under foot. On the north side, ferns, mosses, and late flowers grow.Selected.
[It would be well for teachers and pupils to try to verify some of the above statements.-EDl.

In teaching, as in other things, look up, and the stars guide you; look clown, and the gutter becknos. -Thos. E. Sanders.

## Carleton County Institute

The annual session of the Carleton County Teachers' Institute met at Woodstock on the 20th and 21st December, President H. F. Perkins, Plı.B., presiding. Eighty-six teachers were emrolled. The presence of the Chief Superintendent, Dr. Inch, and of Dr. C. C. Jones, Chancellor of the University of New Brunswick, was highly appreciated and added to the intercst and profit of the meetings. The first session opence with a thoughtful and inspiring ad dress by President H. F. Perkins. The key-note of his address was "Kecp Growing." Inspector F. B. Meagher, W. B. Delyca, Chairman of the Woodstock School Board, Principal C. D. Richards, B.A., and Principal F. C. Squires, B.A., followed with well chosen remarks. An interesting paper on Drawing occupied the remaining time of the session.

The time of the second session was occupied by a masterly paper on Literature by Mr. C. D. Richards, and a visit to the Sloyd room where a most interesting lesson to a class of seventh grade boys was given by Miss Lonise Wetmore.

On Friday morning Mr. E. C. Squires delivered an excellent address on Geometry, and Dr. C. C. Jones another on Mathomatical Study and Teaching. Mr. Isaac Draper read an interesting paper on Spelling, and Mr. A. E. Rideout opened the discussion.

On Friday afternoon the Institute listened to two excellent papers. Composition was discussed by Mr. Jas. O. Stecves, and Geography by Mr. Gco. N. Belyca.

A cordial invitation from the trustees at Florenceville to hold the next meeting of the Institute in the new consolidated school building was accepted, and the time for the meeting was set for the first week in ()etober. The following officers were elected: (Chas. 1). Richards, President ; F. C. Squires, VicePresident: R. E. Estabrooks, Secretary; Miss Helma Mulherrin and Miss Marion R. Thompkins, additional members of the Executive.
R. E. Estabrions. Sectetary.

Wisulstock, N. B., Dec. 26, 1 got.

Teacher-"Which is farther away, England or the moon?"

Pupil-"England."
Teacher-"Why ?"
Pupil-"Pecause you can't see England and you can see the moon."

Problems in Rhymes.
I
Some frisky little squirrels fond T'wo pecks of chestnuts on the ground; Now, let the wisest child declare How many pints of muts were there.

## II

Hidden in the fragrant hay, Harry found, one autumn day, + dozen (ggs, and 12 eggs more; In all theee eggs how many score?

## III

Ninnic, and Jack, and Grace, and May; Nine year old Charlic, and two year old Ray. 3 pounds of candy the six must share, And I must divide it true and fair; What part of a pound shall 1 give each one? Now tell me quick and the problem's done.

## IV

$2 \times 1$ is the balby, $2+3$ is Lou, $6 \times 5$ is dear mamma, $20+15$ is papa, And $3 \times 3$ is Sue;
What is the sum of their ages? Tell
And we.ll declare you've answered well.

## V

For Eisice's birtlday mamma made A gallon bow of lemenade, To every lad and every lass, She gave a half pint in a glass The number of the children name Who unto Elsic's party came.

## VI

Jlere is a riddle for yon to guess, There are twenty rosettes on dolly's dress, In each rosette, Maid Mary said, She put eighteen inches of ribbon red; How many inches of ribbon gay Did Mary use? Come, who will say?

## VII

llickory, dickory, lock! It is just nine by the clock. low many minutes must pass away. Fere half-pant ten the chock will say?

VIll
Alde 59 and 34,
Take ors allaty,
The muniser left divide by . 3 ; What allawer comes, I pray: 1X
\& Hags hats Jack, and, wn wach one. 7 stripes of red and o of white: How many - tripes on thone four flags? Now tell me culuck if your are bright.


#### Abstract

X Nultiply 45 by 2 , Divide the answer by 3 . 'Take away 6 , and add If: What number, then, will you sec? -l"irginia Baker, in Primary Plans. ['hese may be eut out, pasted on cards and given to the pupils.] "Oh, a qrouble"s a te $n$, Or, a trouble's an ounce, And it isn't the fact That you're hurt that counts, But only how did you take it?"


( )he night l'aganini was going to the l'aris opera house, where he was to astonish every one by playmis on one string. leing late, he took a cab, and when he arrived at his destination, the cabby wanted ten francs. "What," he exclaimed, "you are crazy, I have only had you five minntes." "I know it is much," said the oher, "but for you who make a fortune by playing on one string it must be ten francs." "Well," said Pasanini, handing him the right fare, "when you can make your cab go on one wheel come to me and I will give you ten franes."La Caricaturista.

Canada's proportion of population is only 1.5 to the square mile (England has $55^{8}$ and the United States 21 persons to the square mile); population b." her first census of 1665 was 3,251 ; population in 1 年 63 was 70000 ; population at Confederation, IR 67 , was $31 / 2$ millions: population in 1901 was 5.371 .315 ; poptulation, estimated, on June 30, 1904, was 5.604 .328 : began the twentieth century with the same population as the United States began the ninctecntl.

Fully one-half of the movements of pupils and classes should be indicated by a motion of the head or the hand. Every movement that can be indicated by a sign or a gesture should be so clirected. Fully one-half of the oral commands shou?d be avoided. Quiet not only sares time, but it induces thought.

It was the first lime Nan had seen any one husking corn. "Do you have to madress every single ear "" she asked, soberly--Judge.

The length of the Siberian Railway is 6.675 miles. The kengit of the Cape to Cairo Railway, when finished, will be 6,500 .

ASLEEP.<br>The sun is gone down,<br>And the moon's in the sky;<br>But the sun will come up.<br>And the moon be laid by.<br>The flower is asleep.<br>But it is not dead;<br>When the morning shines, It will lift its head.<br>When winter comes,<br>It will die,-no, no;<br>It will only hide<br>From the frost and the snow.<br>Sure is the summer,<br>Sure is the sun;<br>The night and the winter<br>Are shadows that rum.<br>-George MacDonald.<br>\section*{CURRENT EVENTS.}

The british House of Commons has approved of bills granting constitutional government to the "Iransvatal and Orange River Colonics.

From the Lake-of-the-Woods westward, as far as the Red Kiver, the boundary between Canada and the United States is marked lyy iron posts, similar to those which mark the boundary between New Brunswiek and Maine. These pillars are eight feet in height, and are eight inches square at the base, tapering to four incles sequare at the top. West of the Red River valley, the line is marked by mounds of earth or stone, or loy wooden pests, until it reaches the mountain region, where in some parts shafti of granite are used.
Wallace, the explorer of Labrator, believes that this little known part of our territory contains great mineral wealth.

English weavers look to West Africa as the source of their future suplly of cotton. i railway is proposed to assist in the develoment of the country; and it is predicted that before many years there will be a political union of Sierra Leone, the Gold Coist, and Xorthern and Sonthern Nigeria, which will bring into existence a great West African dominion.

A new alloy, a compouncl of silyer, nickel, biamuth and gold, can be used by electricians as a stubstitute for platimum, at alont one-thirteenth of the enst.

The United States 1 House of Kepresentatives has orderel that the government printing office shall "adlace to the standard of othograplay prescribed in the gencrally accepted dictionaries of the Eingli,h language," inctean of fohlowing the "simplitied spelling" adsocated loy President Romevelt.

Great Pritain, France and Italy have signed an agrocment for the maintenance of the integrity of Abys-iniat.

Sir Itiram Maxim in reported to have said that we thall not have balloons in the future; we shall have flying machines. The tlymy machine, he thinks, sill he a byot-
ing affair at first, just as the antomobile was; but he looks. for startling developments within the ensuing year, and the balloon will soon be a thing of the past. We can hardly estimate at present all that this means in the practical affairs of nations. It is sufficiently startling to know that any of the wild imaginings of what might happen if men could fly are coming true.

German experiments seem to show that deep sea fishes. may be gradually accustomed to living in fresh water, and will remain active and healthy in their new surroundings.
The Japanese prepare from soy beans an agreeable sulbstitute for milk.
The extensive use of scaweed in Japan gives employment to whole viltages. More than fifty varicties are atilized either for food or as raw material for manufactured products. The Japanese government encourages the industry. and has offered a reward for the best method of producing iotline from sea plants.
A repair ship, called the "Cyelops," is among the latest additions to the Britislı navy. She will be fitted up with foundries and workshops, and witl carry three hundred men, mostly workmen, and be ready for serwice sometimeduring the present year.

Cheap postage on British neriodicals is promised us. Linformately we now get United States publications postage free, and have to pay postage on those that come from the C'nited Kingtom: but the present arrangement with the C'nited States is to be discontinued, which, with the promised reduction, will give ta no longer a postal preference in fator of foreign literature.

A chair of proturoology has been established in the Lnitersity of Lomdon. "This new braneli of science treats of the minute organisms known as protozoa, matry of which are now known to exist as parasites in the bodies of higher animals, and some of which are recognized as tixe canses of infectious diseases, such as malaria in man, ath the Texas fever in cattle, formerly supponed to be of :-xctable origin.
Filying-fish fly: An Englich maturalist has wetermined that they do mot merely funp from the water, guiding their flight through the air by their extendet wing-like fins: but that there is a rapid viluratory motion of the wings white in flight, sustainang them longer in the air that if impelled only by the movements of the tail and fins in leaving the water.
The separation of church and state in lirance has taken place without any serious disorders. There has becen on both sickes and effort in aroid violence, and the result has chown that in the lixench Republic a great rewolution can be effected guietly.

The provisions of the Algeciras conference giving tor Frame and Sadin pobice powers in Woncco eems on lave come in fore mot before it wa- neederl. The Sultan's athomity hat heen openly defied in Tangier, where the

The Nexicall genermment han taken ower the prineipal railuay of that cometry, fearing that the great railway corporations of the United States might otherwise get possecsion of them.

The new Canadian tariff provides for a general sehedule

an intermediate tariff, to be conceded to non-British countries which make trade concessions to Canada. The latter is at present ineffective, as there is as yet no foreign country in a position to claim its advantages.

The President of the United States has issued a proclamation, calling upon his people to contribute to the relief of famine sufferers in China, where crops have been destroyed by floods and millions of people are on the verge ot starvation. The past year has been a year of great disasters, including the earthquakes in San Francisco and Peru, the eruption of Vesuvius and the typhoon at Hong Kong; but the present distress in China, in which whole provinces are involved, is so widespread and so terrible that its cause must be considered the greatest disaster of all. In Canada, the year has been one of great prosperity and progress. and we have been able to send large contributions to the help of the needy in other lands.

## SCHOOL AND COLLEGE.

Mr. H. H. Biggar has been appointed principal of the graded school at Sussex Corner, N. B.

Mr. John G. NcKinnon, who has had charge of the Blak k River school during the past term, has been appointed principal of the Douglas Avenue school, St. John.

Miss lrances Prichard, who has had charge of the manual training department in the consolidated schonf at Florenceville, N. B., has accepted at similar position in the Owen Sound, Ontario, school.

Canadian school chideren are to raise amonument to the memory of Alexander Muir, author of "The Maple Leaf Forever."

The pupils in the Woodstock, N. B. grammar school gave Principal C. D. Richards a magnificent china tca set on the eve of his marriage with Mis, Grace Roton, until recently matron of the hospital there.

Dr. G. R. Parkin, of London, the Rhodes scholarship commissioner, will wisit the prineipal educational centres in Canada early in the new year.

Mr. H. H. Stuart, principal of the Harcourt. N. B., superior school, has resigned his position to become editor of the Neweastle Advocate.

Chancellor Jones has recommended the establishment of a law department in conncetion with the University of New Brmuswick.

## RECENT BOOKS.

Messrs. A. \& W. Nackinlay, of Halifax, have published a second edition in a neat book form of the sketel of 110n. Joneph Howe, written in is-5 by the Rev. G. M. Grant. The publisher, very properly think that the ment ry of this distinguishes Nova Seotian should be kept dive among his fellow-countrymen, and to that end have brouglit out this re-print, which is in a comvenient form for preservation. The ready symbally of the Rev. D): Grant in dealing with his sulaject in aboremt on crery pare of the memsir, which should find its way into every home and achool in the province. Adeled tu the wetels in Howes Essay on the Organization of the Impire, and at chronoLegical list compiled by Mr. Joseph .V. (hisholm, harrinter. Halifax, of his writings and speceloce the whie formine
a handsomely bound volume of no pages; price one dollar in cloth binding. (Sec advertisement on another rage).

Much credit for compiling and bringing out this sketch is due to Mr. J. W. Logan, classical master of the Halifax Academy, and the profits from the sale are to be devoted to replenishing the academy library, a very worthy object. The Psychological Principles of Education: A Study in the Science of Education, by Herman Harrell Horne, Ph. D., Dartmonth College. Cloth. Pages 435 . Price \$1.75. New York: The Nacmillan Company. Toronto: The Alacmillan Company of Canada, Limited.
This volume is the attempt of a teacher to lay the scientific foundation of the art of teaching, so far as these are concerned with psychology. Principles of pure psychology are transformed into edtucational principles for the teacher, who may not have the skill or knowledge to do so for himself. In the first part the aim is to get bearings in the field of the science of cducation. The remainder of the book sketches such a science from the standpoint of psychology, treating education as viewed from the physical, intellectual, emotional, moral and spiritual standpoints, The book is divided into five parts, and at the end of each there are numerous references to educational authorities on each of the above divisions. The book is a timely contribution to education as a science, and is worthy of a thoughtful consideration by teachers.

From the same publishers, there is the First Book in Latin, by Inglis and Prettyman (price 600 ), which provides as a first year Latin course a sufficiently adequate preparation, the authors think, for the reading of Cæsar: The Kipling Reader (50 cents), with selections from the prose and poetry of Kipling, embracing such stories as Wee Willie Winkie, Mlowgli's Brothers, The Lost Legion, and others; Emirson's Reprisintatizc Mcn ( 25 cents), in the Pocket Series of English and American Classics, which includes besides the Represintatiz' Men an epitome of Emerson's writings in general.

Messrs. A. S. Barnes \& Company, of New York, mahe a New Year's contribution to education in the ©orm of a half dozen books of a convenient form for use in the schoolroon. These are: Mary Kingrwood's School, a real story of the experience of a primary teacher, Miss Coritne Johnson, who becomes the obzerver of her own school. idealizing it from the standpoint of sympatly: Hints and Helps from many schoolrooms, being the plans and devices of many teachers who have used them; Little Ta:ks on School Management, a suggestive and helpful Look on the sarious problems of school work; Composition in the Eementary School has many good ideas in mating co:nposition interesting to the earlier grades: Simple Expcrimonts in Physics, in two volumes, the first dealing with mechanics, heat, fluids, and the second with sound, light. magnetism, electricity.

Messrs. D. C. Heath \& Co., Boston, have published Victor 1lugo's Quatri-i ingt-tricize, with introduction, notes and vocabulary. While omitting many details, the substance of this thrilling novel is retained, and in the words of the atuthor, who was over eventy years of age when he wrote the book but with powers of delineation and description mimpaired. It will prove attractive and nseful to students of lirench. From the sanse publishers there is Sudermann's Teja, a one-act drama, the hero of which

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(Tcja) is a King of the Goths in their decline. It is a delineation of the workings of a noble nature under difficulties, supported by the sympathy of a wife, who has an intelligent appreciation of his ambition and the unhappy situation in which he is placed. With introduction, notes and vocabulary.

Ginn and Company, Boston, publish Good Hialth, (mailing price 45 cents), by Frances Gulick Jewett, desigued for chiddren of ten or twelve years of age, and treating almost exclusively of hygiene rather than of anatomy or physiology. It presents facts rather than dogmatic conclusions. Among the subjects presemed are pure air, ventilation, cleanliness, the care of eyes, ears, finger nails, hair, teeth, skin and lungs, the importance of exercises. bathing, etc. Its treatment of alcohol is vivid but not pathological. The author deals with the results of its use upon the individual as a whole sather than with its disease effects upon the stomach, liver, etc.

Munchausen's Reisen and Ahentewor (price 30 cents), published by D. C. Heath and Company, Boston, a few selected stories from the famous Baron Munchansen's journeys and adventures, edited with introluction, notes. vocabulary and exercises for composition; very suitable for younger German readers.

From Blackie and Son, London. we have Charles Dicken's The Cricket on the Hiarth. (price (id.) ; Siches from "Cranford", (6d.), arranged from Mre. Gaskells novel for acting by girls: and Blackices South Africou Handhouk of English, (price 9d.), a acries of practical exercisce in finglish composition, with portry for reading and recitations; designed for grade six.

## RECENT MAGAZINES.

The Christmas number of the Canadian Magazine is heautifully illustrated, and the reading matter interesting and appropriate to the season. The Canadian is improving with each number and is keeping pace with the rapid growth of the Dominion.
Horace G. Hutchinson, whose success as a writer of historical novels was assured by his stirring story, A Friend of Nelson, now turns his clever pen to tiction of a different type. His new story, Amelia and the Doctor, is a clarming succession of pictures of village life and character, reminding one at times of that exquisite classic, Cranford. It is now appearing in The Lizing Age in serial form, and began in the number for December 8.
The Christmas number of the Atlantic Monthly is distinguished by the excellence and variety of the good reading which it presents from a host of able contributors. A fitting tribute to that eminent teacher and scientist, the late Dean Shaler, is fuund in the essay-The Measure of Greatness
The serial story, The Cliaffeur and the Chaperon, now running in the Dofincator, combines very well the features of interest of that remarkable country: Holland, and the developments of a good story. The Value of Rest is a helpful article, advising how to obtain healthful reprose of mind and body.

I am much pleased with with your paper. I do not think I ever spent one dollar more wisely. Rosevale, N. R.
L. Anvie Steeves

"THE SNOWBALL"-GUILTY OR NOT GUILTY?

# The Educational Review. <br> Devoted to Advanced Methods of Education and General Culture. 

Published Monthly. St. JOHN, N. B., FebrUary, $1907 . \quad \$ 1.00$ per Year.
G. U. HAY '

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## Phivted by Barnes \& Co., St. Joho. N. B.,

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THE EDUCATIONAL REVIEW. St. John, N. B.

The Rbwew regrets, owing to a cause not foreseen in time to remedy, that no picture is sent out with this month's number. The March Remew will contain the usual attractive picture supplement.

Tue seventh amnual meeting of the Canadian Association for the l'revention of Consumption and other forms of Tuberculosis will be held in Ottaw: the 13th and 1 th of Narch next. A public meeting of the members of the association and of the citizens generally, at which His Excellency will preside, will be held at the Assembly Hall of the normal schoot, Ottawa, Weduesday evening, March 53 th, at which Dr. Sheard, the chairman of the Ontario Provincial Board of Health, will deliver a lecture upon " Home Treatment of Consumption."

A daily paper is in error when it refers, in bold headlines, to Supt. Dr. A. H. MacKay, of Nova Scotia as a recent convert to simplified spelling. Supt. MacKay has been an advocate of reformed spelling for a quarter of a century past. It is but just to say, however, that in practice Dr. MacKay is still in the ranks of conservative spellers.

The Dominion Educational Association will meet in Toronto, July 9-12 of this year. The programme is now being arranged, and the readers of the Review will be kept posted on the details of the meeting in future numbers. Special railway rates will be secured. The meeting promises to be one of great interest. Principal W. A. McIntyre, of Wimnipeg, is the president, and Dr. D. J. Goggin, Toronto, the secretary.

Some months ago the Review received a large number of subscribers, each one of whom was to pay his or her subseription directly to the office at a certain specified time. It is a pleasure to note that the agreement was faitlafully kept in nearly every case. This is mentioned simply as a matter of recognition on the part of the Review toward these teachers, not as a measure of justice to them. The word of a teacher should be as good as a bond.

Tise January number of Acadiensis, beginning Vohme VII, is one of the most interesting numbers yet published of that magazine so ably conducted by Mr. D. Russell Jack. It is full of valuable historical articles, prominent among which is the History of Pokemouche, one of a series of North Shore (N. I.) Settlenents, by Professor IV. I: Ganong. The spirit of the author is admirably shown in these words, to which we would invite the attention of all desirous of rescuing fragments of our local history from oblivion: "It is my aim to collect the essential facts while yet there is time, and to preserve then thus for the future generations of New Brunswick men and women who will care for these things."

The Review is indebted to Mr. G. F. Chipnian, formerly a teacher of Canning, N. S., now on the staff of the Winnipeg Free Press, for extracts containing late educational news of the Prairie provinces. There seems to be a strong demand there among school boards and inspectors for compulsory attendance. Nor do they stop there. If there is to be compulsory attendance of schools, there must be schools worth the attending, and ample provision for all the children. Many advocates of compulsory education forget this corollary.

## Better SaIaries.

From all parts of Canada comes a strong protest against the injustice of the present meagre salaries of teachers. The Frce Press of Wimipeg, one of the most influential papers in Canada, has recently devoted considerable space to the strbject and has strongly emphasized the pressing need of more remunerative pay. At the close of the Normal school recently in that city, Principal W. A. McIntyre, after showing the insufficient salaries of teachers compared with other wage earners, said:
"I am not complaining that the salaries of beginners are not high enough. They are often too high. Some teachers are worth $\$ 500$ a year less than nothing. The pity is that we should be forced to supply them. But the complaint is that higher qualification and length of service are ignored.
" The only remedy possible is. (i) That the municipal and legislative grants shall be graded, so that service and experience shall be recognized; (2) That the local school board shall give way to the municipal school board."

Principal McIntyre brought forward several instances to show that the novice in teaching is almost as well remunerated as the teacher of experience. It is much the same in the east.

White a novice may occasionally be worth more than the one who has had a long experience. it must be that service and experience, with some teaching ability to start with, are the only true standards to gauge advancement. And to make teaching a profession that shall attract and retain the best talent it is necessary to recognize that the central fact in the school system is the teacher, and that remuneration should advance in proportion as the teacher advances.

A superintendent of schools draws attention to the fact that $\$ 600$ ten years ago had the purchasing power that $\$ 750$ has to-day. But in spite of twentyfive per cent increase in the cost of living. teachers' salaries have not increased. A teacher con-1. recently in the St. John Daily Telegraph that few
women teachers in that city get more than $\$ 300$ a year, a sum that is no way adequate to secure a respectable living. There are many-perhaps more than half-of the teachers in the Maritime Provinces who do not get that much. Is this justice? Govermments, school boards and parents should think of it, and exert themselves to remedy a matter that will soon grow to be intolerable. Comfortable living salaries should be the measure of appreciation that people render to good teachers for their services. It is admitted that teachers do not work for salary alone; but it is a mean thing for people to impose on them because they teach from a sense of duty.

## A New Drawing Course.

The announcement, contained in recent numbers of the Review, that the Board of Education had prescribed a New Brunswick edition of Atgsburg's Drawing Course, must have been hailed with satisfaction by the teachers of the province. The absence hitherto of a graded and suitable course in drawing has been one of the greatest wants in the schools of New Brunswick. Thanks to the efforts of the Board of Education and Mr. H. H. Hagerman, of the Normal school, who has revised Augsburg's graded practice books and made them suitable to our needs, the teachers and pupils have a system of drawing which, with some enthusiasm and endeavor, should produce excellent results.
Augsburg's Drawing System is embraced in three books, and is designed for use in graded and ungraded schools. Each subject is treated topically and is arranged so as to give the widest latitude and the greatest flexibility in teaching.

Book 1 is a teacher's hand book, showing simple and effective methods of teaching drawing, including color work, in the first, second and third grades. An additional book on drawing with colored crayons is published with the set.

Book II is a regular text-book, containing the essentials of free hand drawing. It may be placed in the hands of the pupils of the fourth. fifth, sixth. seventh and eighth grades, and used the same as a text-book in arithmetic or other subjects. It may also be used in connection with a system of copy or blank books or drawing pads.

Book III contains short. yet complete, courses in brush drawing, wash drawing, water color drawing, pen drawing, the drawing of the human head and figure, decorative design and constructive drawing.

The practice books are designed for pupils of the earlier grades, but until sonse facility in drawing is acquired they may be used as far as grade eight. A set of cards, to aid in the teaching of action
drawing in the primary grades, form a valuable addition to the course.

The books are published by the Educationa! Publishing Company of Boston, and are for sale by C. W. Hall, Fredericton, to whom orders should be sent.

## Color in February.

Some day after a snow storm we want yoll to try to see color in the landseape. Do you think an artist would paint a snow scene perfectly white? What colors do you see in the shadow of the tree trumks? Look at the tracks you made across the yard or fie!d; can yous see any color in them? Do not be discouraged if you fail in the first attempt. Look often and at different times in the day.

Perhaps in your sehool work, you have painted trees trying to represent the fresh green of spring. the rich color of summer, or the bright tints of autumn. Did you ever think to look for color in the bare truuks and branches of the trees in winter? See that mass of trees at a distance; another nearer by. Look in the morning, in the middle of the day, and just at sunset. Look on a bright day and on a "gray day." What colors do you see? Are they always the same? Watch the changes in the color of the twigs as spring comes on.-Ablic $E$. Coinstock.

## About Plans.

The following. taken from an exchange, shows that there is nothing like a good brisk walk in the open air to form and perfect phans for the schoolroom:
" She's an earnest soul with a determined face. She is on her way to school where a rom full of eager faces are in waiting. ()ver an unprotected rough country roall she is walking, with her head full of thoughts on a perplexing problem. Mary is a firm believer in a plan before she attempts to work. This walk of a mile has cleansed her lungs. The peach bloom is in her cheek and there's a sparkle
 the thought that she's going to help somelooly. in spite of thirty daily recitations. in spite of the poor equipments, in spite of the lack of co-operation of trustees and patrons, Mary resolves that on this wery day the plan must be tried."

Cross ignorance is 144 times as bact as just ordinary ignorance.

## Glimpses into Schoolrooms - II.

## By the Ediror.

It was a country school,- not in a poor district, nor by any means a wealthy one. The children were plainly but neatly dressed. This caused me to look at the teacher. Attired in a plain grey dress, a neat white collar with a touch of red about her throat, her hair attractively arranged,--suggested that the girls had found in her a pattern of neatness. Her quict orderly movements also suggested the cause of the good order which prevailed in the schoolroom.

As I approached the building a few minutes before, I noticed some boys and girls hurrying towards the entrance, talking and laughing as they went. They bade me a quiet, pleasant "Good morning," as they passect. There was no loitering at the door. They entered quietly as if impressed with the notion that serious work was before them, and that they intended to be partners in it. The teacher had been writing at the board when I entered, and stepped forward to welcome me as an old friend, assigned me a seat, and contimued her work. The scholars did not stare at me; they looked, indeed. in my direction : a few to whom I was known gave me a pleasant smile and a nod of recognition which made me feel quite at home. They seemed to be all busy at something. and cast freguent looks at what the teacher was writing on the board.

A touch of the bell and instantly all filed to their seats, quietly, and with no show of doing anything in a way different from their usual custom. The* teacher introduced me to the school, but did not ask me to make an address. Instead-a much better custom-we talked easily a few moments on offhand topies such as the bright morning, the school and attendance. In this brief conversation the scholars joinecl, not obtrusively, but in response to some remark or question of the teacher. In short, they conducted themelves as well-behaved people do cm such oceasions: and they seemed like one happy family:
( Mne of the familiar Psalms was read; anotherthe twenty-third-was recited in unison; the teacher in a few shori simple words asked for a blessing on the day's work: and the sehool sang two stanzas of "Hy Own Camadian Home."
"This is our morning for Canadian history." said the teacluer, turning to me. "We ahways have a litte song. appropriate if possible, before we take up each lesson."

An excellent plan. I thought.
"But do you always begin the day with Canadian History ?"
"Not always. In fact we change the order of our lessons nearly every week. Sometimes we take arithmetic first; sometimes a language lesson; and sometimes a nature-lesson, which the scholars always enjoy, as it gives them the opportunity to recall what they have seen in their walk to school, while it is yet fresh in their minds. Then this changing about relieves the work of monotony, and the scholars seem to enjoy the lessons better."
"History is very often a tedious subject for children," I ventured to suggest, but careful to speak loud enough so that the scholars should hear. A smile of incredulity passed over some faces; in others the eyes actually twinkled with ill-concealed merriment.
"It is not so here, I am happy to say. We find history one of our most interesting subjects," said the teacher quietly; and approving nods came from every quarter of the room.

Turning to the blackboard in the rear of the platform she said, "Here we have an outline map of Eastern Canada which I draw afresh for every lesson. It only takes a few moments; and you see we have none too much blackboard space. Then we have here certain dates, I492, I497, I534, I579, I604, suggesting names of explorers in Canada. These dates and the outline map suggest the basis of the carly exploration of Eastern Canada. As we study each explorer we draw lines on the map with colored crayon, following his line of travel, using different colors for different explorers. In order to fix the travels of explorers in their minds after we have gone over them in class, I give one explorer to each child and have him look up all the facts possible, from pictures, books, and conversation at home, about his dress, looks, birthplace, the style of vessel, crew, etc. Then I call upon him in class and he tells the story as though he himself were the explorer. If he can dress himself, or at least wear some token to make his personation the more real, so much the more vivid is his narrative.
"You would hardly believe," said the teacher, her animated face turned to me, "how interested the boys and girls are in these exercises. A few days ago as they were starting off on a snow-shoe tramp after school, one of them said, 'Come, let us be Columbuses, Cartiers, and Champlains today, and go to places where we have never been before.'
"Sometimes when we have a few minntes to spare
at the close of a lesson, one scholar volunteers to represent Cartier or some other exp!orer, and he is ready to answer questions about the Indians, or other experiences he has met in coasting along the eastern shore of New Brunswick or up the St. Lawrence river.
"Some days, to vary the lesson, we take the history as a reading book, and a few paragraphs are read in turn followed by questions and explanations. The pupils very often volunteer information that they have gained from other books or from conversations at home; and the lesson is conducted in a free and easy manner.
"We are always on the lookout for pictures of persons and scenes in Canada, which may be cut from illustrated papers, calendars, tourists' guides, magazines, etc. These we mount on cardboard or manila paper and distribute to the members of the class. If a pupil finds out a good deal about a picture or writes a very good story on it, he is allowed to keep the picture as his own on condition that he is to bring it to the class on any day it may be required for general use.
"We have a good way, I think, of allowing a member of the class to put a question on the board each day, of his or her own devising, indicating where or in what book the answer may be found. Each pupil is expected to look up the answers. One question the other day caused considerable searching and trouble before it was answered: 'Who sailed to Newfoundland in the ship called the Golden Hind?
"Ol, there is no end to the interest which can be aroused in a history lesson," said this enthusiastic teacher. "The scholars are not required to memorize anything; but they remember everything." And the proof was in the lesson that followed.
"May I come in again, Miss -_?"
"Oh, yes, we shall always be glad to see you."
The day before St. Valentine's, draw on the blackboard, or get some one to do it for you after school hours, a large valentine; heart-shaped is the prettiest. Decorate it in colors according to your taste, and write on it, in ornamental lettering, " To my school, from its teacher." Then watch the faces of the children as they file into the schoolroom the next morning. I know how they will look, for I tried the effect of a blackboard valentine upon my pupils. -Hints and Helps for the Schoolroom.

# February and Its Noted Days. 

Eleanor Robinson.

The name of February is derived from the Latin verb februare, to purify; or from Februa, the Roman festival of purification, which was celebrated during this month. The old sayings and proverbs concerning February and its weather commemorate it as a moist month, and also betray the superstition that a fine February augurs ill for the weather to come. For example :

## " All the months in the year Curse a fair Februeer."

"If Candlemass Day be cold and clear, The worst of the winter is yet to appear."
A German proverb says that the shepherd would rather see a wolf enter his stable on Candlemas day than the sun. Another German saying is that the badger looks out of his hole on Candlemas day, but if he sees the sun the goes back.

* February, fill the dyke

Eitler with the black or white."
-is an English saying, and the poet Spenser writes:

> "Then came old February, sitting In an old wagon, for he could not ride, Drawn by two fishes, for the season fiting, Which through the flood before did softly slide, And swam away."

The second of February, commonly called Candlemas day, is a church festival, commemorating the events recorded in the second clapter of St. Luke's gospel, the presentation of Clirist in the temple, and the purification of the Virgin. The poj)ular name keeps in memory a very ancient custon, that of walking in procession with candles, and singing hymms. A description of this ceremony is given by a writer of the twelfth century, as follows:
"We go in procession, two by two, carrying candles in our hands, which are lighted, not at a common fire, but at a fire first blessed in the church by a bishop. They that go out first, return last; and in the way we sing, Great is the glory of the Lord.' We go two by two in commendation of charity and a social life; for so our Saviour cont out His disciples. We carry lights in our hands; first, to signify that our light shoufd shine before men; secondly, this we do this day especially in memory of the Wise Virgins that went to meet their Lord with their lamps lit and burning. And from this usage and the many lights set up in the church this day it is called Candelaria, or Candiemas. Because our works should alt be done in the holy fire of charity, therefore the candles are lit with holy fire. That they go out lirst return last, to teach humility. in honour preferring one another. Because God loweth at cheerful giver, therefore we sing in the way."

In 1539 , King Henry VIII proclaimed:
"On Candlemas Day it shall be declared that the bearing of candles is done in memory of Christ, the spiritual light, whom Simeon did prophesy, as it is read in church that day."

In the time of Charles I, when candles were brought in at nightfall, people would say, "God send us the Light of Heaven.'

In Scotland, Candlemas day is one of the four quarter dlays. It was an old custom in that country for children attending school to make small offerings of money to their school masters on that day. The hoy and girl making the largest gifts were chosen king and queen of the day; a holiday was given, a procession, led by the king and queen, and a bonfire lighted. called the "Candlemas blaze."

The snowdrop, which appears in England about this time, is called the "purification flower," and also the "Fair Maid of Felbruary:" Temyson's St. Agnes prays:
" Make thou my spirit pure and clear, As are the frosty skies,
Or this first snowdrop of the year That in my bosom lics."
The teachers of the early church had a wise plan of su'stituting Christian festivals for heathen ones, ancl. whe:e it was possible, even allowing the newly made converts to follow the old customs by giving them a Christian meaning. It is generally thought that the observance of Candlemas day is an instance of this. February was the Roman month of purification, and an especial feast was the Lupercalia, held on February fifteenth (sce Julius Cæesar, Act I, Sc. I, line 72), and one of the rites of this festival was the lighting of candles in reference to those used by the goddess Ceres when she was seeking her daughter Proserpina. The ceremonies also included a drawing of lots by the young men and women, amd this is supposed to be the origin of the ofd custom of drawing lots for Talentines on the fourteenth of the month. Pepys tells us in his Diary how this fashion was followed in England. Each gentleman was expected to give treats and presents to the lady whose name he drew and whose Vajentine he was. On February z2nd, ifigi, Mr. Pepys writes:
"Sir W. Batten yesterday sent my wife half a dozen pairs of gloves, and a pair of silk stockings and garters, for her Valentines."

And on Sit. Valentine's dity, doro, we find the following entry:
"This morning comes little Will Mrerer to be my wife"s

Valentine; and brought her name writ upon blue paper in gold letters, done by himself, very pretty; and we are both well pleased with it. But I am also this year my wife's Valentine, and it will cost me five pounds."

The sending of verses to the person chosen, or assigned by lot, as a "Valentine," is also a very old custom. This pairing off of comples is sometimes said to be in imitation of the birds, "ho were thought to choose their mates on St. Valentine's day. In "The Parlement of Foules," Chaucer says:
"For this was on Seynt Valentyne's day, when every foul (fowl) cometh ther to choose his make (mate)."

And the same poet has many other references to this saint. Michael Drayton (1563-1631) wrote some charming venses to his Valentine, beginning as follows:

> " Muses bid the morn awake, Sad winter now declines, Each bird doth choose a make, This day's Saint Valentine's. For that good Bishop's sake Get up and let us see What beauty it shall be That Fortune us assigns."

On the occasion of the marriage of the Princess Elizabeth, daughter of James I, and ancestress of our present royal family, on St. Valentine's day, ${ }^{1613}$, the poet Donne wrote a marriage hymn beginning:

> "Hail, Bishop Valentine, whose day this is, All the air is thy diocese, And all the chirping choristers And other birds are thy parishioners."

No connection has ever been traced between the Roman bishop and martyr, St. Valentine, and the popular ceremonics with which his day is observed.

The great function of the public schools is to establish character. One of the essential clements of character is a sympathetic attitude towards the rights, privileges, and feelings of others. When a child has learned to sympathize with the feelings of animals, he has made a long step towards the recognition of the rights of his fellow-beings and has made a substantial gain in his education. Any effort looking towards an increased appreciation of the birds and animals around uns is a legitimate part of public school work.--Supt. Stratton D. Brooks.

The Review has been excecting? helpful to me in my work. The picture supplements meant much to my school. After careful study they were passepartouted and hung on the walls.

Hamilton, N . Y. Miss A. W. Warren.

## Geography Match.

A pleasant and profitable game which often helps out in a Friday afternoon programme or in a regular geography class, is this. Have the class choose two captains, as in a spelling match. The captains then take turns in choosing their companions. When all are ready, the teacher writes as many names of rivers, lakes, mountains, cities, etc., as she thinks best on the blackboard, these names suggesting the lessons studied during the week.

The captain of one side begins with the first word on the board, and tells one fact about it. If the word is the name of a river, he may tell its source, what direction it flows, into what body of water, or some interesting thing about it. The captain on the other side takes the second name and does the same with it. The next in order takes the third, and so on, until all the words have been gone over. When one fact has been told about each, the list is gone over again, and a different fact is told the second time. The object is to be able to tell as many different things about the various places, rivers, etc., as possible, without repeating any fact. If this should occur; that is, if any one should happen to mention a point that has already been spoken of, he must take his seat. Thus the game goes on until all have been compelled to resign their places, or all has been told that can be. In order to be good geography matchers, it is necessary that the pupils study their every day lessons thoroughly; and this they are very likely to do for the sake of the Friday afternoon geography match.

In place of having pupils take seats on making a mistake, which deprives them of any further benefit they may receive from the exercise, a mark may be placed after theit name showing that they have failed.

A pleasant variation of the regular reading lesson is this. Ask each pupil to pick out a story in his reader that he likes particularly well. Each one has a different story, this is in order to break the monotony. Have the children prepare their stories carefully, that they will be able to tell them well. The pupils in studying should jot down on a small piece of paper the subject of each paragraph, to be used if necessary. While pupits are telling their stories, the teacher should take a seat with the rest of the andience and leave the pupil to depend entirely upons himself. The children are all anxious to tell a good story, and so do their best to express themselves clearly and well.-Ex.

## About Numbers.

Our readers may be interested in the extract below, taken from Victoria, B. C., Colonist. Verifying some of the restults may form an exercise in arithmetic as a relaxation from severer problems:
For a first illustration, let us add up any column of figures, say:

$$
\begin{array}{r}
476 \\
536 \\
892 \\
\hline 1904
\end{array}
$$

Now add 1, 9 , 0 and 4 together and you get 14 , and adding the 1 and 4 together and you get 5 . Now add the figures in the lines in the column crosswise, thans, 4,7 and 6 , equal 17, and so on with the others. You get as the result 17 , 14 and 19; and if you add these three sums together yon will get 50 , and 5 plus 0 is 5 , which is the same as you got by adding the digits in the first total. There is doubtless some reason why this is always the ease, no matter what figures are used or how many enter into the caleulation. But what is it?

For a second illustration take the following: Take any number, the digits of which added make ig. Thus $2 \%^{*} 9$. the digits which added make 19, and 1 and 9 make 10. Now subtract 289 from 1,000 and you have 71 I , and add these digits together and they make 9. And you will get 9 as your answer no matter what number you start with, provided its digits add up to 10 , and the amount from which you subtract it is either 100 or some multiple thereof by 10 , that is to say 1,000 , or 10,000 , and so on. There must be sonse reatson why this is so, but it is not very apparent.

Take another series of figures, the digits of which, when added, will make 6 , say 87 . Thus 8 and 7 make 15 , and 1 and 5 make 6. Now divide 87 by 6 and you have three for a remainder. Turn the digits around and you have 78, which divided by 6 leaves no remainder. Thus we reach the rule that any number, whose digits. when added as above give 6 as the result, is divishble by 6 without a remainder if the last digit is an even number, and with a remainder of 3 if the lant dignt is an odel number. This rule, as well as that immediatcly preceling it, is of some use in making mental calculations.

Take a number divisible ly 3 . without a remainder, cay 8754. This number is divisible by 3 without a remainder no matter in what order you place the digits. Thus zit 45 . 4785 , and any other comhination of these figures is divisible by 3 whout a remainder. Now take 8754 , and insteal of 8 write any mmbers which, when added, are equall to 8 , and so with the other digits. Thus for 8 put down 521 , for 7, 52, for 5. 14, and for 4, 31. Placing these in : row, you will have 52152 I 431 , which is divisible by 3 withont : remainder just at the origimal mumber 8754 is. The variattions of this exercise are very many, and it seems as though the rule deductible from them may be of value.
lerhaps you know that any mumber made up of three repetitions of the same number or series of numbere is divisible by 3 without a rematineler. Thus 777. of 555. or 262026 or $1,31.31,3$ are all divisible by 3 without a remainder.

This, if not generally known, onght to be, for it is a little bit of very useful knowledge. In fact the last tliree rules come in quite handily in making hurried calculations.

A good deal of amusement can be extracted from all the above arithmetical curiosities, if one only takes the trouble to study out the results that can be olftained by becoming familiar with them. They enable seemingly impossible results to be obtained from the statement of some single number. Working out some of the calculations ppssible by their use is very excellent mental exercise. There are very many other curious things about numbers, and the more one investigates them, the more evident it seems that there is an undiscovered side to the science of arithmetic.

## Questions on Any Pine in Your Locality.

What is the gencral shape of the tree, and where does it grow?

What is the shape of the cone?
What is the character of its bark?
How long are the needles, and how do they compare in length and thickness with any other species of pinc in your locality?

How many neeiles grow together in a btundle?
Is this bundle enclosed in a litt!e sheath at the base? (In the white pine the sheath drops off very soon.)
Are these bundles grouped in distinct tassels, if so, how many constitute a tassel?
What slate of green is the general color of the foliage?

Cut a pine needle in two and look at the end with a lens, and note its shape. The white pine differs decidedly from the others in this particular.

How can you tell this year's from last year's and from next year's cones?

How old is the cone when it opens and scatters its sceris?
How many sceds are there tunder a single cone scalc?

How many kinds of flowers does the pine tree have and where are they borne?

How is the pollen carried?
What is the most important commercially of our pine trees?

What is the pine wood used for?
What is resin? ()f what use is it to the tree? To the cone?

What is the difference between resin and rosin?
-Home Vature Study Course.
It is not enongh to have earned our livelihoond * * * the earning itself shoth have been serviceable to mankint.-K. L. Sterenson.

GEOMETRICAL DRAWING,GRGVII,

|  |  |  | Fig 4 |
| :---: | :---: | :---: | :---: |
| $\text { Fig. } 5$ | Fis 6 . |  |  |
|  | $\text { Fig. } 10 .$ |  | $\text { Fig. } 12 .$ |
| rig. ${ }^{13}$. | Fig. 14. | 5ig. 15. | Fig 16. |
| Fig' 7 . | ris. 8. |  |  |
|  | $r_{i s} 22$ |  | $\text { Fig } 24$ |

## Geometrical Drawing - III.

## Principal F. G. Matthews, Trlro, N. S.

The following exercises have been prepared for grade VII. They will be found to be easily grated, repeatedly bringing in principles already learned. Space has forbidelen the drawing of more scales. but these shoukd be continned and increasinge in difficulty. In the early attempts with the problens in triangles and quadrilaterals, it is a good plan to use inches with decimals to one place. For this purpose. if the ruler does not shew ienths of an inch, the children can easily make a paper sate. dividing the inch into ten parts as in the problems 6 and 7 for grade V1. The protractor should also be constantly uned in the construction of angles, as these are now reguited of all sizes.

It will be moticed that exercises hate not been placed after every problem. These have been omitted to save space, and becanse they are so easy to formulate.

Teachers requiring more exercises can find mamerous examples in one of the books prescribed for Nova Scotia, viz. "Meelanical lorawing." by S. . Morton. (T. (". Allen \& (\%., Ilalifax.)

The remainder of the regultar polygens have been incheled in the work for this gratle. becaluse they are favorite with children, and yet rexpire such accuracy that they induce careful work.

Figg. 1. To construct an isosceles priangle. the base and sides given. Let . Wl: be the base and ( ${ }^{-}$ the length of sides. Firom $A$ and $l$ a as comtres, and radins equal to ( . describe ares cutting at 1 ). Jain Al) and lib).

For an exercise this may le given to seate, than, base 1.3 inches and sides 2.6 inches: and the children then reguired to determine the angles with gorotractors.

Fite. 2. The rame as lige 1. the vides and base angles given. let $A$ be the length of siden and () the base angere Draw ans base lince . If. It I make the angle li. \1) equal to the angle (). (int oft
 ravlins, draw arc . \i: Join lof:
fint exeroine sive the bides in inchen or ceonti metres and the angle in dexrees.
 angle griven. I.et NE be the base and 1 ) ( 1 : the vertical angle. With ( a centre and ant conmen ient radins. Jran are bol: Jom D)E. It $X$ and l;
 (1)F: Produce the sides till they meet at k .

Piti. \& \%n construct a triangle: having gival
the three sides. Let $A B$. ( and 1 ) be the three sides. With A as centre and radius equal to C, draw are at E . With $l i$ as centre and radius equal to 1 , draw another are cutting the first. Join NE and liE.

This and the following exercises in triangles and quadrilaterals may be given to various scales. Example:-I man has a triangular shaped piece of land. The bommaries are respectively 215. Wo and 135 yards. Draw a plan of the plet to a scale of too yards to the inch.
fig. 5. The same as Pig t. two sides and one angle given. leet $\begin{aligned} & \text { di and ( } \text { be the sides and I) the }\end{aligned}$ given angre. It I make the angle liAfe equal on 1). Cut off NE equal to $\left(C^{\circ}\right.$ Join lill.

Fig. 6. The same as Fige. t. the base and two base angles griven. .et . Wli be the base, and ( and D) the given angles. At I construct angle lidE equal to ( and at limake angle dlate equal to 1 ). proxlucing the sirles to meet at E .

Fini. 7. The some as lige. the perpenclicular height and two sides given. Let $A l$ be the perpendicular hecight, and ( and 1 ) the sides. Through li
 with radius equal to ( Iraw are chtting base at E , and with radins equal (w) 1 ) another are conting at 15. Join $\backslash 1$ and $\mathrm{IF}^{\circ}$.

Fus. K. Tha some as fig.g. t. similat ma wiven triangle 1 eet Whe be the given triangle. in a base of anys sutable kength copy the wo base angles just as in liig. o.
lig. 9. Fo comstruct a quetrilateral. four sides and one angle given. Leet ill. (. 1) and tis be the siven sides and li the given angle At lis cope the
 and ratios expal on 1 ). draw are at H . From $I$ as centre and radiuts expal to E , draw amother are cutting at 11 . Join . $11 /$, II .
life. 10. The same as lige. 9, thate siden and two ineluded angles wiven. It $A$ and $l$ copse the required angles cutinge off the sites eoftad to those given Join 110 .

Pici. 11. To construct a rhombus, hatinge given the diagomals. Let I amd 1 ibe the diagomals. I ratw (') erpual io. 1. liseet it at $1 \therefore$ and draw J" (i, mak-
 1:1). 1) (: and (i $0^{\circ}$.

Fag. '2. Fo make atrapezimm or any rectilineal fosture equal to a gia en unc. Liy drawing diagomals ont the figure into triangles, and enpy weh triangle a

Fig. 1.3. To find the centre of a giten circle.

not be parallel to one another). Bisect each chord and produce the bisecting lines till they meet in O , which is the centre of the circle.

This may be worked by drawing one chord, bisecting and producing the bisecting line to form a diameter, and again bisecting the diameter.

Fig. I4. To describe a circle of gizen radius which shail fass throngh any two given points. Let $A$ and $B$ be the points and $C$ the radius. From $A$ and $B$ as centres and radius equal to $C$, draw arcs cutting at $\mathrm{O} . \mathrm{O}$ is the centre of the required circle.

Fig. 15. To describe a circle which shall pass through any three giten points. Let $\mathrm{A}, \mathrm{B}$ and C be the given points. Join AB and BC . Treat these as cloords and bisect as in Fig. I3. From O as centre and radius OA describe the required circle.

Fig. 16. To describe a circle about a gizen trianglc. Hisect any two of the sides and complete as in Fig. 15.

Fig. 17. To find the locus of the centres of all circles which shall totuch two given inclined lines. Let AB and BC be the given lines. Bisect the angle ABC by line BD. All circles touching the two lines lave their centres on BD.
Fig. 18. To inscribe a circle in a giacn triangle. Bisect any two angles and produce the lines till they meet in $O$. Drop perpendicular OE from $O$ to line AB . With () as centre and radius OE describe the circle.

Fig. 19. To inscribe a regular pentagon in a circle. Draw two diameters AB and CD at right angles. Bisect OB in E. With E as centre and EC as radius, draw are CF . With C as centre and radius Cl; draw are GFH. Then CG and CH are two sides of the pentagon. Cut off the others on the circumference.

Exercise. Join alternate angles to make a five pointed star.

Fig. 20. To construct a regular pentagon on a given base. Bisect the base AB and erect perpendicular. Ciut off (D) equal to the base AB. Jom BD and produce to E , making 1)E equal to ha!f the base. With B as centre, and radius 1 BE, draw are cutting the perpendicular in $F$. From , , B and $F$ as centres, and radius $A B$, draw arce cutting at (i and II. Join AG, (iF, FH, and 11 .

Fig. 21. To inscribe any regular polygon in a giern circle. Draw the diameter Ab. Divide it into as many parts as the figure is to have sides, in this case seven. From $A$ and 13 as centres amo 1 I $B$ radius draw ares cutting at ( ${ }^{\circ}$. 1) raw a ine from $\left(^{\circ}\right.$ thengh the second division chtting the circumier-
ence on the farther side at $\mathrm{D} . \mathrm{AD}$ is one side of the polygon. Step off the rest.
This and the three remaining exercises require extreme accuracy to get correct results.
Fig. 22. The same as Fig. 21. Another method. Draw any straight line touching the circle at A. From A as centre, draw any semicircle. By trial divide this semi-circle into as many parts as the figure is to have sides. Join Ai, A2, etc., producing the lines to cut the original circle. Join the points where they cut the circle to form the polygon.

Fig. 23. To construct any regular polygon on a given base. Let AB be the given base. Bisect it and erect perpendicular of indefinite length. On AB erect a square and draw diagonals cutting at E . Also on AB erect an equilateral triangle with apex at F . Now E is the centre of a figure of four sides equal to $A B$, and $F$ is the centre of a figure of six sides all equal to AB . Bisect EF in G . This wil! be the centre of a figure of fi'e sides all equal to $A B$. Take the distance EG, and step off from $F$, giving the points $7,8,9$, 10, etc. These will be the centres of figures of the corresponding number of sides. For instance from 7 as centre and radius 7 A . describe circle. With compasses step off the sides all equal to $A B$ on the circumference to form a regular heptagon.

Fig. 24. The same as Fig. 23. Protractor method. Divide 360 by the required number of sides to find the exterior angle. liy means of the protractor construct angles at $A$ and 1 ) as shewn. Cut off AC and BD equal to Al . The figure may be completed by the protractor, but a leetter plan is to bisect two of these sides, and produce the lines till they meet in O . From O as centre and radius OA describe the circle. Step off distances equal to $A B$ on the circumference.

## Two Little Fellows.

I know a little fellow whose face is lair to see:
But still there's nothing pleasant ahout that face for me: For he is rude and selfish, if he can"t have his way, And always making trouble, I've heard his mother say.

I know a little fellow whose face is plain to see, But that we never think of, so kind and hrave is he: He carries sumshine with him, and everyhody's glad To hear the cheery whistle of that dear little lad.

Lou sec it's not the features that others judge us by. But what we do, 1 tell you, and that yout can't deny: 'The plainest face loas heauty, if its owner's kind and true. . Ind that's the kind of beauty, my boy and girl. for you. -Our Lithe Pcople.

## Comenius, Pestalozzi and Froebel.

Mrs. C. M. Condon, Truro, N. S.

Three bright particular stars shed their light over the educational world from the time when Comenius, justly called, "The Father of Modern Education," began to teach in the year 1614, until the death of Froebel in 1852 . John Amos Comenius was born at Nivnitz, in Moravia, in 1592, and died at Naarden, near Amsterdan 10-1. . Nthourrl fully prepared, his youth prevented him assmming the pastoral office until 1618. In the interim he was rector of the school at Preran, from which place lee proceeded to the parish of Fulneck, where he remained six years.

From Fulneck, in common witl all the evangelical pastors in the Empire, he was driven out in 1624, loss of wife, child, less books and all his possessions, by the cruel edict of Ferdinand 11 . He took refuge at Lissa, in Poland, where in 1628 he was invited to take office in the factilty of the . Icademy. During all these years he responded to invitations from Princes and Nobles to organize and re-organize, on his own sound principles, their system of education. His labors were so abundant, and bestowed in so many different quarters, that it is almost impossible to follow him minntely. Meanwhile his fame as a pedagosist spread abroad.

His Janua Lingmarum (The (iate of Langrages) which appeared in If,31, was at once translated into twelve European !angruages, and several Asiatic. Among other eopies in the liritish Mosemm, is a fth edition, bifo, in Firench, Italian, Latin and German, arranged in parallel columms. In $16+2$ an edition was also published in Greek and Latin. This important book greatly improved the teaching of Latin, by using the mother-tongue, as the mediuns of instruction.

In 1641 he was invited by the English Parliament to come to Engrland, and to settle a national system of education. He was received with distinguished honor by the Universities of Oxford and Cambridge. Later on, they gave a very tangible proof of their esteem, by sending lim the stinn of nearly fromo stg. to aid him in his edlueatimald enterprizes. One cannot but speculate, in view of the present chatotic state of linglish educational affairs, on what wonled have been the result of comenims' 'abors, if the ( ivil War had mot frustrated the decispla. (xenstiern, the fanmone
 dan lingland. womed his services in bry? amb

Comenius drew up the scheme of a syviem of education for Sweden.

In 1648 he went to Hingary by invitation of one of the Princes to organize schools. In 1652 the Poles burned Lissa, to which lie had returned, when losing for the second time everything he possessed, he narrowly escaped with his life. After many perilous wanderings, he reached Amsterdam, where he was accorded the generous welcome due to his genius, learning and piety.

In 1648 he had been made a bishop of the Bohemian Church, which, however, by the destruction of Lissa, was brought to an end as an organization; so that he was the 20th and last bishop of the Bohemian Brothers, the Episcopate of which had lasted 204 years. In Amsterdam he continued his life-work, and this truly great man, who bore his sorrows with fortitude and pious resignation, turned them to account by his writings. One, The Labyrinth of the World and the Palace of the Heart," is said to be equal to the Pilgrim's Progress; but this, and most of his religious writings, are overshadlowed by his renown as an educationist and his Orbis l'ictus, which lead the child by pictures and descriptions, to a knowledge of "the principal things in the world and the principal occupations of man.". This ideal demands carly training of the infant by the mother to prepare for the school; oservation, perception, reffection and expression of knowledge, as fast as gained, influent and accurate speech, and in litt'e works of skill, wisdom, knowledge, virtue and piety are the results to be aimed at. I Ie complains that instruction is too much like "a load of wood well piled; whereas, it should be a growing plant." "(rive knowledge as a seed to be developed by the mind of the child himself, not as a grown-up plant."

In his plea for nature-study, he says;" Everyone sits, as it were, in the amphitheatre of God's wisdom, the poorest and meanest may see something therenf, and should relate it." He deprecates severity in discipline, then rife, but woild by firmness, genticness and reasom, "treat children as reasonable beings." [iody, sonl and spirit are wo le tratimed for life here, and life hereafter, and no amomet of learning can compensate the lack of virne and piet

Ile is separated from us by 250 years, but the morc colosely yous stmy lis doctrines amel life-work, the mote charly sont perceive low molle and trace is his ideat of edncation, the hessings of which be "omblafler forall, willont regard to ramk or sex.

Pestalozzi was born in 1740, seventy-five years after the death of Comenius. He died 1827, sad, lonely and depressed by the sense of failure; yet he had sown seeds that have germinated and borne rich fruit all over the world. As long as men value education, his name will be held in honor.

Early in life he lost his father, and his loving mother. The faithful servant who had promised never to leave him, brought him up so tenderly that they made hin weak in body, and gave him no freedom for self-activity. It is always well for a human being to make his mistakes early enough to retrieve them. Childish errors are seldom fatal ; and are necessary for self-revelation. This advantage, Pestalozzi lacked to the detriment of his adult life.

His ignorance of the world, his want of sound training and instruction, and the late period of life at which he became an educator, fill us with wonder that he shontd have accomplished so much.

He was the connecting link between Comenins: and Froebel, in his enthusiasm of humanity, and his self-sacrificing devotion to the cause of education. The children. left orphans by the Napoleonic wars. hungry, naked and forlorn, filled him with compassion. He gathered a few of them into his own house." I was father, murse, teacher: I lived with them, was their constant companion." Think what this association with filthy, half-savage creatures meant to the man brought up so daintly: An old convent near Stanz, was given up to him by the Cantonal Government to house the increasing numbers. His ain was to "teach the harassed poor to live like men."

His teaching of arithmetic, and object lessons attracted the attention of the civilized world, to a study of his methods, and in the fine Forough Road Schools of London, his methods were illustrated and carried out in a logical sequence, of which Pestalozzi himself was incapable. His discipline in which love ruled, raised the whole moral tone of school-life. But unlike (omenius and Froebel he could not explain, and set forth in due order, the principles on which his practice rested. "When askerl to fo so he would say:" wateh my teaching. and yout will sec." The noblest tribute to Pestalozzi has been paid lyy Froclocl, who, with his own two pupils, spent two years at l'verton, in Switzerland, studying and teaching in his institntion. This inability of Pestalozzi to discern the operations of his own mind was a constant trial to Frocelocl. whose clear and logical acumen ewablen him to disentangle. arran: " and rearrange at concept and view
it in its action and re-action and interaction with other concepts. But such power is the possession of few. The clue to Pestalozzi's success, lies in his oceanic heart of benevolence."

Froebel, was born 1782, and died 1852. Like Comenius he was a thoroughly educated man. He had had already a most chequered career, and a wide experience of men and things, when in 1805 , he took the situation in the model school at Frankfort on the Main, offered by Dr. Gruner, the principal, himself a disciple of Pestalozzi.

When Froebel stood before his large class of boys, he says: "I found my vocation; the fish was in its native element, the bird was in the air." He spent his vacation of a fortnight with Pestalozzi, and in 1808, passed two years at Yverton. In 1812 he enlisted in Luitzow's famous Black Corps, for he felt that one who was not prepared to defend his country, was unwortly to instruct and train the young. There in camp, he became acquainted with his future faithful co-workers, Middendorff and Langethal, two divinity students, who gave up their profession, that they might help him in his ideal of raising man, through and by education, to a true conception of their relations to nature, humanity, and Gorl. Many other faithful laborers have thrown light upon the problem of education, but, by general consent, these three men stand pre-eminent in the grandeur of their conception of man; in the soundness of their methods for his development: and in the sagacity with which they have brought down visions, floating in the air, and made them realities by means, skilfully adapred to the nature and needs of the infant. the child, the youth and the man.

## Winter Nests.

() piteous nests of winter-time, Disclosed to every careless eye,
In hedges dark with dripping rime.
Where is your Summer secrecy,
Your green pavilion of the prime?
Poor little nests, that hang forlorn In bushes almost reft of leaves,
And naked thickels of sharp thorn-
Rolsbed of your shelter hy those thieven
The frosts, and made a mark for scorm!
Nests that so cunningly were thatehed
With fibres made 10 interlace,-
In which the brittle hrood were hatehed.
In your once cherinhed hiding-place.
By Winter's harpiev rullely suateled!
-The sifectalor

## The Music of Poetry.

## By D. F. French,

Principal Home Correspondence School, Toronto.
Music is the expression of emotion without words and may, therefore, arouse feelings of sadness, joy, peace, etc., without involving the conception of any definite ideas. Poetry is the expression of cmotion in words, and an attempt is made to produce, as nearly as possible within the limitations of ordinary speech, the effects of inusic. This attempt is the basis of all forms of metre.

Almost any one can recognize the difference between the slow, solemn tones of the Dead March and the quick, cheerful movement of an Irish Jig: the dreamy music of the waltz is readily distinguished from the "ragtime" of the negro melody: The difference in effect is caused by a difference in the length of the notes used and the number gronped in each measure, and a consequent variation of the accent. The fewer and longer the notes in a bar the more solemn and stately the music, while severa! short notes in succession produce a lively effect.

We find precisely the same thing in poetry: long vowels and short measures are in keeping with verse of dignity and deep thought; longer measures with shorter vowel sounds produce a form of metre suitable to lighter themes. We need only to read alond the lines:

> " Break, break, break, On thy cold, gray stones, O Sea;"
and:
"So this is your cradle, why, surely. my Jenny,
Sucli cosy dimensions go clearly to show," etc.
-to tell from the movement of the voice alone that the theme of the former is full of deep, serions emotion, and that the latter is an extract from something light and htumorous.

Examine the metrical form in these quotations: the first line of the first extract has but one syllable to a measure; in the second line two syllables is the rule; the vowels are mostly long. In the second quotation there are three syllables to a measure and the vowels sounds are mostly short.

You may refer to any poetical selections from good authors and you will find that our rule invariably holds true. Wordsworth, in his disregard for form, gives tus his sweetly serious "Reverie of Poor Susan" in lively dance time and thus spoils the whole effect. How can one feel serions in reading:

[^23]The imitative harmony of poetry is ustally the musical effect resulting from the variety in arrangement of long and short vowel sounds, changes of accent, and difference in the number of syllables used in the measure.

Every lover of poetry can collect abundant examples of musical effect in poems. TVe will, however, cite here a few quotations which will further illustrate the points mentioned.

In Tennyson's Lullaby we find an exact imitation of the rocking of the cradle.

> Sweet and low, sweet and low, Wind of the western sea.

Observe carefully how the monosyllabic foot and what we might call the curve of sound, produce a rythmical movement which, aside from any idea conveyed by the words, impresses a mental picture of the rocking cradle by imitating its sound.

In Longfellow's "Old Clock on the Stairs" the ticking of the pendulum is imitated by a similar device:

> " Forever, Never, Never, Forever."

Tennyson in the "Northern Farmer" makes the o'cl man speak of the canter of his horse thus:

> "Pronutty. proputty, proputty, that's what I. hear cm say."

Can't you hear the hoof-beats on the hard road?
The use of long vowels to give a slow movement to the verse corresponding to the sense, is shown in :
"The long day wanes; the s.ow moon climbs;
The deep moans round with many voices."
Compare with the above the movement of :
"Haste thee, nymph, and bring with thee Jest, and youthful jollity, Quips and cranks and wanton wiles, Nods, and becks, and wreatherl smiles."
In 'Tennyson's "Bugle Song" the arrangement of accent changes in the last two lines of each stanza. First we have :
"The splendor falls on castle walls."

Then in closing:
"Blow, bugle, how, set the wind echoes Alying, Bkow, bugle, answer, celooes dying. dying, dying."
ln the refrain the gradual falling of the stress of voice in the prontunciation of the words in each measure imitates the dying awdy of the echoes. With the stress falling on the word at the end of the measure this effect could not have been produced.

While in much poetry the element of music is greatly subordinated to the meaning, in none-except such as Walt Whitman's-is it entirely absent. Tennyson and Swinburne are masters of the art of infusing subtle music into verse, while Dryden and Pope give us a minimum of musical effect. The poetry of the latter appeals more to the intellect, yet that of the former has a deeper effect since it touches the chords of human sympathy and through its music wakes to life our tenderest emotions.

A Canadian poet-Bliss Carman-says, "The measure of vense has an influence on us beyond our reckoning. The simplest statement of truth, thrown into regular verse, comes to us with new force."

## Lines in Season.

Roll your ball of snow, children, Roll your ball of snow.
The more you roll your snow hall up The bigger it will grow.
Roll a kind thought around, children, Roll it all around,
Until it gathers all kind thoughts That loving hearts have found. -Midland Schools.
Let us be content to work,
To do the thing we ean, and not presume
To fret because it's little.
-Broanning.
The talent of success is nothing more than doing what yoit ean do well, and doing well whatever you do.--Longfollow.

The optimist sees the donghnnt and the pessimist sees the hole-The Lyccumitc.

Count that day really worse than lost You might have made divine,
Through which you scattered lots of frost, And neer a speck of shine.
-Ni.ron Waterman.
I am little February,
Shortest month of all the year.
Short my days are, too, and few, Cold, maybe, but wery merry.
Not so many, it is true, As my sisters bring to yout, But such good days and so dear. I'm the month of Feloruary, Short and cold, bint full of cheet.
May every soul that touches thine, lie it the slightest eontact, get therefrom some good, Some little grace, one kindly thought,
One inspiration yet mufelt, one bit of courage
lior the darkening sky, one gle:m of faith
To brave the thickening ills of life.
One glimpse of brighter sky legund the gathering mist To make this life worth while,
And leaven a surer heritage. -The Outhook.

## I Love the Winter.

First Child-
I love the winter,
Now, don't you?
There is so much
A child can do.
Turns toward the other three children.
Sccond-
I love to coast, and
Skate, and slide, Or from some "pung man" Beg a ride.
lmitates the motions of shating and sliding.
Third-
I love to tunnel
Out the snow,
I love to see a
Snow man grow.
lmitates using a shovel.
Fourth-
But best of all is
Snow to take
And press until fine
Balls you make.
Imitates making a snowball.
All-
And then to throw them One by one;
In snowball game is Jolly fun!
Imitate throwing snowballs at one another.
-Primary Education.

## A Brace of Valentines.

A Scotchman whose name was Isbister
llad a maiden giraffe he called "Sister;"
When she said "Ol, be mine,
Be my sweet Valentine!"
Ile just shimed up her long neek and kissed her.
A lup-po-po-ta-mus named Amos
Was loved by a chorus girl famous;
All the other girls sighed
As they looked on, and eried,
"Please tame us a hip-ro-po-ta-mus."
-The Delineator for February.
[This last imocent jingle reminds one of the wag who stopped his friends in the street on one of the recent cold days, and inquired, with a look of anxious concern:
"Have you seen Amos to-day?"
"Amos who?"
"A mosquito!" and then he vanished.]
"On a dark cold night, not long ago, Came a little child all clad in snow: Small was he as he hurried along. Singing to himself this funny little song:
-Ho! ho! ho! does every one know 1 am little Febrnary from the land of snow?".

## Natural History for Little Folks.

From "Stories from Natural History."

## The Caterpillar and the Fly.

The gardener harl planted a cabbage, had dug and manured the ground, watered the young plant, and cleared away the weeds. And the cabbage grew lustily, bearing young and juicy leaves, and growing bigger and stronger, whilst the garlener watched it and was glad.

But one night, when all the world was asleep, a greedy caterpillar came that way and crept up the stem of the plant. What did it matter? There was no one to see. All night long she never ceased eating, first the young and tender leaves, and then the others, and when daylight cane she hid beneath the foliage. So the caterpillar grew fat and big on the cabbage which did not belong to her, and which she hat neither planted nor cared for. What diel it matter if she wats living on other people's property? There was no one to see.

But with the bright sunshine came the little ichnemmon, or caterpillan-eater, a tiny ily, that is so small that she can harelly be seen, but who, with busy wings and quick little legs, skips from flower to flower, and from leaf to leaf. And so she came to the poor half-stripped cabbage stalk, and to the hidden caterpillar. With her sharp sting she bored a ting hole into the borly of the s'eeping gormandiser. and into this she laid an egg, so minute that, most surely, there was no one to see it, so what did it matter? 'Then she tlew away.

The greedy caterpillar paid no attention to the sting of the fly, and went on cating, till the cabbage stalk stood quite bare. Then, round and fat, she hurried to the wall of the house and climbed up to the roof, where she turned into a chrysalis and remained hanging. And now do you suppose that a beantiful winged buttertly came out of the chrysalis to bly away over the cabbage bed. where the gardener was standing lowking sadly at the naked cablage stalk: No, indeed, no caterpiliar ever cane out of that chrysalis. fors though no one satw the mischief done low the caterpillar, no one, likewise, saw her pmishment. The cocom opened, and, instead of a buttertly, came out a young ichnemmon fly armed with a sharp sting, to fly away and duietly work ont the punishment of other greedy caterpillars, who think it dees not matter what mischiof they (los so long as mo one sees them.

## The Work of Ants.

In a pine forest, on a dry, sandy hillock, there was an ant heap, nearly as high as a child, with swarms of active little ants hurrying up from all sides and creeping into it. Why do you suppose the ants had built this high heap, and what were they so busy about? You may think it was a palace of pleasure, with dining halls and play rooms, and fine fun going on all day, for they were nearly all dragging into the heap something to feast upon, one tugging at a lead caterpillar, whilst another had a dried-up fly, or some other dainty.

Now, let me tell yon, the ant heap is no holiday house, for the ants only built it for their little sisters. It is a big nursery, in which the young ants are nursed and brought up by the old ants, their sisters. They bring together pine needles, blades of grass, and wood splinters, lay them carefully on each other, stick them together with mud and grains of sand. and so make halls and passages, rooms, and closets. They cover the outsitle of this wonderful structure with leaves and pine needles, making a close, slanting roof, from which the rain runs off. leaving the inside warm and clry.

The ant mother lays tiny eggs, no bigger than fine grains of sand, and from each egg there will come a young ant. The old ants carry the delicate eggs deep down into the earth at night, into the lowest halls of the building. There they remain nice and warm throughont the night, and when the sun shines brightly on the heap by day, they drag the eggs up again into the topmost room, in which they are hatched by the sun's rays. But the ant eggs must not only be kept warm like the bird's eggs, to bring the young inside to life, they must also be tended. The old ants lick them daty, covering them with a sweet jnice which they bring in, for without this the eggs would dry up and perish.

Out of the eggs slip little, white. helpless grubs, that can neither walk nor seek their own food. The old ants carry the little creatures up and down in the heap, in just the same manner they did the eggs. fetching them food from the wool and putting it into their mouths. The fuite young grubs only get sweet honey, but as soon as they are big they get stronger food. The grubs are also carefully licked and cleaned every day, so that no speck of dust remains on them, otherwise they would sicken and die.

When they have grown up they wave a fine wel)
round themselves and sleep in it as in a little bed. Even then they are carried up and down daily by their elder sisters, who always find the warmest places to lay them in. Should someone disturb the ant-heap so that a chrysalis lies meovered, the ants never think of thenselves, but in all haste seize it and carry it into safety, whilst others defend the little ones or try to catch the disturber of their peace and bite them viciously.

Inside the cocoon the grub becames an ant. The elder sisters listen carefully every day to hear if the little one is moving and ready to emerge, for she cannot get out of her web by herself. When they hear a knocking inside they cut the web open with their pincers and help the young sister to step out. Now look! This young ant has four delicate wings. In early antumn, when the weather is warm, thousands upon thousands of such winged ants come out of the earth. They buzz up into the air, dance about a while, and then sail far away like a cloud to make new ant-heaps in other places.

The industrious elder sisters can only sit and watch, but they have never expected thanks or reward from their young charges. They found their whole happiness in the care of their young sisters, and when the ant mother lays her eggs again next summer, they will take the same care of the new brood.

## The Story of a Wax Candle.

When in the cool forest the trees are flowering, thick yellow clusters of pollen-covered blossoms lang from the pine and fir trees, and on the ground below many different kinds of flowers open their coloured bells. The stamens of blossoms burst open in the warm sunshine and the delicate pollen peeps out of then like finc, yellow powder.

The ever busy bees are buzzing through the forest. They have to found a new home for a young queen who has arisen at the head of a swarn of bees, and her faithful followers are hunting for building materials. They come to the blossoming trees and flowers and crawl into them. To reach the honey at the bottom of the tube they must pass the pollen-covered stamens, and this pollen adheres to the brown fur of their bodies, so that they are covered with powder when they come out.

The bee will then pause awhile on the glossy leaf of a tree to brush herself carcfully with the stiff bristles of her feet, roll 19 , the sathered pollen into neat little balls, and fasten them to lier legs, where, for this purpose, she has little hollows, ealled pollen
baskets. Then, arrayed in baggy pantaloons, she flies away home.

The pollen bids farewell to the forest trees and flowers, and becomes food for the bees. In the stomach of the bee it changes into the finest wax, which exudes in delicate flakes from beneath the body of the worker bee. The folds between the hard scales of the body are the bee's pockets, for storing building materials. With their feet they putl off the flakes of wax, knead them together with their jaws, mix them with saliva, and build with this mixture the loveliest six-angled cells. In these cells they tend the young bees, their foster children, feeding them and tending them until their charges finally throw off their cocoons.

But in other wax cells the bees store a rich provision of sweet honey. In the winter they crowd close together to keep each other warm, and sleep through the cold winter, so that when spring comes with new blossoms and new honey the cells are still mostly filled. The bee-keeper takes the full honey comb from the hive, and we give the honey to children'to eat with bread, but what becomes of the wax? Why, that comes into the candle.

When Christmas comes and the children are asleep, father and mother fasten a number of candles on a fir tree which the wood-cutter has cut down in the forest. And so at Christmas time these parted friends come together again after a long time of separation. The pollen, after many wonderful adventures, has come, in the shape of wax candles, on to the evergreen branches of a fir tree, and who knows if they did not spring from the self-same forest? The bright flames on the tree are then its blossoms, and have more to do with it than you wouk think at first sight, for have they not come from the same home?

## Query for Review Subscribers.

Mrs. A., Mrs. B. and Mrs. C. and their daughters bought laces. Each paid as many cents per yard as she bought yards, and each lady paid 63 cents more than her own daughter. Mrs. A. bought 23 yards more than Jane, and Mrs. B. II yards more than Eliza. The third girl was named Anu. How many yards did each buy, and whose daughter was Jane, Eliza and Ann respectively?

Answer next month.-C. E. L.
I have read the Review with profit from its first number; and though not engaged in teaching for many years. I still appreciate its increasing usefulness.
C. E. Lund.

Sackville, N. B.

## Rhymes for Little Folks.

## The Pebble's Lesson.

How smooth the sea-beach pebbles are! But do you know,
The ocean worked a thousand years
To make them so?
And once I saw a little girl
Sit down and cry
Because she couldn't cure a fault
With one small try. -Selected.

## Two New Scholars.

They'd never been to school before,
They'd never been near a schoolhouse door, Those bashful little boys.
Mamina had taught them all they knew-
She was a lovely teacher, too--
But now-just hear the noise!
Though to eaclu other close they kept,
One bent his golden head and wept,
And the other, he wept, too.
Around each neck a dimpled arm,
As though to keep them safe from harm,
A sweet child gently threw.
" The corner seat's enough for three;
Come over there and sit with me,"
She swcetly said; and-my!
They like the school so much to-day,
I know if they were taken away
They'd both tune up and cry.
-Golden Days.

> Rainy days and sunny days-
> What difference makes the weather,
> When little hearts are full of love
> And all are glad together? -Selected.

## The Song of the Wind.

l've a great deal to do, a great deal to do ; Don't speak to me, children, I pray;
These little boys' hats must be blown off their heads, And these little girls' bonnets away.
There are bushels of apples to gather to-day, And, O! there's no end to the nuts;
Over many long roads I must traverse away,
And many by-lanes and short-cuts.
-Sclectid.

## The Fox and the Squirrel.

Two squirrels on an oak-tree sat, Fngaging in a social chat,
When one-the younger of the twainOf his acomplishments quite vain, Began to loast of what he'd done, How all his mates he could outrun; And if but half he said was true, He could outjum! a kangaroo.

Now, as it chanced, the jagged rocks Beneath the tree concealed a fox, Who, overhearing what was said Among the oak-leaves overhead, Bethought him of a sly design, Whereby he might on squirrel dine; So up lhe sat and clapped his paws, Loud shouting, with a mock applause:
"Bravo! Bravo! my agile friend, Your wondrous skill I must commend, But really, I shonld like to see You jump from ont this tall oak-tree To yonder ash ten fect away." ('Twas twenty, I am bound to say),
"The feat will please my children well, When I their bed-time story tell."
"Nay," said the elder to young Frisky,
" Don't undertake a jump so risky,"
To which the younger one seplied,
Puffed up with flattery and pride:
"Though you may lack ability I'll show you my agility."
Then wildly leaped with aim so blind, That-Mr. Fox on squirrel dined.

## A Winter Piece.

But Winter has yet brighter scenes,-lue boasts Splendors beyond what gorgeous Summer knows; C: Autumn with his many fruits, and woods All flushed with many hues. Come when the rains Have glazed the snow, and clothed the trees with ice; While the slant sun of February pours Into the bowers a flood of light. Approach! The incrusted surface shall upbear thy steps, And the broad arching portals of the grove Welcome thy entering. Look! the mossy trunks Are cased in the pure crystal, each light spray, Nodding and tinkling in the breath of heaven, Is studded with its trembling water-drops That stream with rainbow radiance as they move, But round the parent stem the long low boughs Bend, in a glittering ring, and arbors hide The glassy floor. Oh! you might deem the spot The spacious cavern of some virgin mine Deep in the womb of earth-where the gems grow, And diamonds put forth radiant rods and bud With amethyst and topaz-and the place Lit up, most royally, with pure beam That dwells in them.

I have been a subseriber to the Review from its first issue. It has tatught me much; it has encouraged me when I have been discouraged, and made my work a pleasture when there was dinger of thinking it a toil. I venture to wisl the Review and its editor many haply years in working for the benefit of others.

> Very sincercly yours,

Margarat S. Cox.
Cornhill, N. J.

## Aunt Mary's Four Guests.

"The table is all set, Aunt Mary."
"All right," Aunt Mary answered, "we will have dinner as soon as the outdoor table is ready, too."
"Why," exclaimed Sue, "it's dreadful cold. Who would want to eat outdoors to-day?"
"I know it is cold," Aunt Mary replied, "and for that reason I must be all the more particular to spread a nice feast outdoors, for I have four guests who come to eat there every day."
"Sue was very much puzz'ed, and she watched curiously while Aunt Mary brought out a piece of suet and a slice of bread, and cut them into small pieces.
"The table is under the elm tree, just outside the dining-room window, and the guests are a squirrel, a bluejay and two little birds called sapsuckers."
"Oh!" exclaimed Sue, beginning to understand.
"I like to feed them at dinner time," Aunt Mary continued, "because then I can watch them while I eat my own dimner. They have been lots of company for me this winter."
"Oh, I should think it would be nice!" exclaimed Sue. "Can I help set their table?"
"Yes, indeed," answered Aunt Mary; and then they went out together to the little shelf under the elm tree, and there they seattered the bits of bread and suet.
"The suet helps to keep them warm in the cold woather," Aunt Mary explained, as she placed the last piece upon the board.

Then they hurricd in, for it was cold, as Sue had said, and in a moment more were ready for their own dimer, for Aunt Mary lived alone, and Sue had come to spend her holiday vacation with her.

It was only a few minutes before one of the little sapsuckers appeared, and began to peck cagetly at the suet. He was working busily away. when down the tree came the squirrel. The little sapsucker hastily caught a bit of suct in his bill and flew back to the liml, of the tree.
"Oh, that is too bad," exclaimed Sue. "Won't they eat together :"
"No," said Aunt Mary. "Sometimes the sefuirrel and the blucjay will cat together for a time, for the bluejay is nearer the squirrel's size, but the little sapsuckers are afraid of them both, and usually the squirtel is king of the feast."

Just then a gorgeous lird, which Sue knew from the color of its feathers must be the bhejay, came boldly down beside Mr. Squirrel. Ite flutered his
wings as though for a sign to the squirrel to leave, but the squirrel did not think he had had his share, and nibbled away on his bit of bread. Pretty soon he took another piece and ran with it up the tree. The bluejay flew off with a piece of suet, and in a twinkling the two sapsuckers flew down and began to eat.
"It's just too funny," said Sue, "the way they take turn about. I wish they would all come and eat peaceably together."
"I wish they would," said Aunt Mary, "but they have not become that friendly yet. Perhaps they may before the winter is over, but I am afraid not. I notice, though, that each one seems to get his share of the feast."
Just then Sam, Aunt Mary's cat, jumped upon the sewing machine which stood in front of the window.
"Oh!" said Sue in alarm, ready to run and take him down; but to her astonishment the two little birds went calmly on eating, and paid no attention to Sam, while Sam himself sat quietly by and watched the birds at their dimer.

Aunt Mary noticed Sue's look of amazement, and laughed.
"I don't wonder that you are surprised," she said. "but both Sam and the birds have learned that there is a good thick pain of glass between them. When they first began coming Sam was quite excited. He junuped upon the machine, scratched upon the glass, and of course frightened both birds and squirrel away. Then when they came again, he tried jumping for them, but he found that he only dashed his foolish little head against a very hard window pane. The birds, too, soon found that he could not reach them, and now they eat, as you see, while he sits and watches them."

Sue had almost forgoten her own dinner in her interest in the small visitors in "feathers and fur" just outside the window, and during all the rest of her stay with Aunt llary she enjoyed her dimer more than any other meal, for she never tired of watching these small guests who seemed to fin:l something different to do for her amusement every time they came to their outdoor table.-J. D. Coceles. in Kindergarten liagazinc and Pcdagogical Digest.

Messrs. L. Higgins \& Co., Moncton, N. B., are sending out a very attractive advertisement, havin: as a centre piece the pictures of the "Founders of the Dominion," It is sent by mail. pre-paid, to anl: adldress for forty cents.

## Talks With Our Readers.

"Subscriber" thinks it would be charming to start a literary correspondence club on some page of the Review, to which literary people, students and teachers could send questions regarding the author, (whoever is selected), and his poetry and writings. Also that a number of competitive questions on the author and his work be submitted every month to the corresponding editor. these questions to be answered by the members of the club. "Subscriber" adds: "I think that either a Browning or Temnyson club would make a very strong appeal to the readers of the Review:"

The idea is a good one, and the editor would be glad to consider details personally or by letter, if "Subscriber" will favor him with her address.

A "High Scuol Teacher" who has been especially interested in the efforts of the Nova Scotia teachers to remedy the defects of their high school course, suggests that the high school of New Brunswick is in as serious a conclition as that of the sister province. He asks, "when will the educational authorities here have the courage to grapple with the questions?"

The two greatest needs in the high school at present are, to lessen the presstre by reducing the number of subjects taught, and to provide optional courses. The latter would entail considerable additional expense, and would perhaps be out of the question in any but our largest commmitics. How to secure the best results from efforts and the money spent on our high schools is worthy of consideration, and the columns of the Rewinw are open to our correspondent or to those who have something tangible to offer.

A correspondent would like to see Dr. A. I1. MacKay's address on the study of Latin published in the Review, and adds: "I think those great debates on school questions, as that forinstance which occurred last summer in Nova Sentia, stir up people and have a great educational effect on the community."

Dr. MacKay's address is pullished in full in the N. S. Journal of Elucation for October last.
"Subscrabre":-"I have had considerable difficulty in teaching Hay's History of New lirunswick to my pupils. It seems too difficult for them to understand. Do you know of any way by which it could be made easier and more interesting to the
pupils? If so, I hope yot may have time to publish it in the Review, so that this difficulty may be remedied by your kind help."

It should not be difficult to arouse the interest of children in the story of their country. That was the special ain in view in writing the history, and many children have read it with the same zest as they would any other story. "Subscriber" may be helped in reading on another page how one teacher interested her children in history.

## CURRENT EVENTS.

Alzen is the name given to a new metal composed of two parts of aluminum and one part of zinc. $1 t$ is as strong as iron, takes a high polish, and does not rust as quickly as iron.

Esperanto is making greater progress than did any other proposed intermational language, and it is experted to come into general use as a means of communication between men of different nations who do not understand each other's native tongue.

English capitalists have closed a contract with the government of Newfoundland for a fast steamship service between Si. Johns and a pori on the lrish coast.

Russia will begin the withdrawal of sroops from Manchuria without waiting for the 25 th of April, the date fixed by the treaty of Portsmouth.

The greater part of the city of Kingston, Jamaica, was destroyed by earthquake on the fith of January. Fire followed the earthquake. and many lives were lost. The Dominion government has given $\$ 50,000$ towards the relief of sufferers, and the United States government sent prompt assistance.

Much indignation was felt when it was reported that the admiral in command of the United States ships at Kingston had taken matters in his own hands, landing arned men on British soil and raising the United States flag; but it has been explained later that he landed men under arms at the request of the local police inspector to overawe the convicts in the penitentiary who were supposed to be on the puint of rising, and that he recallell them on the same day at the governor's request. 'The naval officer in command of a British ship, which arrived later, offered to send men ashore If needed, but his offer was delined.

Nearly one lumaled thonsand immigrants from the British lskes, over fifty thonsand from the continent of Eisfoper, and wer sixty thomsand from the United States were added to the population of Camath in Igot.

Lorl Strathoona has agreed to give $\$ 2.500$ a year fur live years fur excavations among the Hittite ruins in Asia Minor. Two thomsand inseribed tablets have been found in the ruins of one of the llittite cities. lmportant discoveries in ancient history are expected.

Recent discoveries in Central Asiat include some ancient manntheripts on birch bark. tugether with patper mantacripts probably lelonging to the eighth contury of whr era.

A German inventor is able to sond messages ower a distance of twenty-five miles by wireless telephone, and be
lieves that the possibilities of extending the distance are almost limitless.

A new electric light filament has been invented which requires less than one-fourth the energy to give the same light as given by the carbon filaments now in use.

The Shah of Persia died on the 8th of January, and was succeeded by his eldest son, Mohammed Ali Mirza. The new Shah is familiar with European affairs, and is said to have approved the great political change which marks the close of his father's reign, the calling of a National Assembly. The new Assembly met on the 3rd of January, but five days before the death of the late Shah. It has control of financial matters and public works, but only an advisory voice in matters of administration.

A projectile that takes photographs is another German invention. It is in the form of a shell enclosing a camera, the shutter of which works automatically as the projectile begins to descend, thus obtaining a picture of a broad expanse of country.

Pneumatic locomotives in use in German mines have an air tank in place of a stcam boiler. The air is stored at high pressure; and its expansion gives a safe, reliable and cheap power.

## SCHOOL AND COLLEGE.

Mr. Elmer E. King, for twenty years principal of the Loggieville, N. B., school, and a native of Kings County, died recently after a short illness of pneumonia. He was an estimable citizen and a competent instructor.

Among the candidates at Acadia University for the Rhodes scholarships to be awarded this month is Arthur Estcy, of Fredericton, nephew of Mr. J. W. Spurden, manager of the People's Bank.

Mr. J. V. Lynn has resigned his position as instructor in manual training at the N. B. Normal School to assume a similar position at Calgary.

Mr. C. J. Merscreau, M. A., has recently been appointed principal of the 1 lorton Academy, Wolfville, an institution in which he has tauglat with distinguished ability for several years.

Dr. Ernest Rutherford, Maedonald Professor of Physics at McGill University, has resigned to accept the post of Langworthy Professor and Director of Physical Laboratories in the University of Manchester.

Principal W. B. Shaw, recently of the Bristol, Carleton County, superior school, is at present teaching in the Industrial School near Red Deer, Alberta, and finds the work ${ }^{\text {q }}$ uite interesting.

Principal E. B. Smith, of the County Academy, Port Hood, C. B., is receiving deserved commendation for his excellent management of the schools of that town. Grectings, the local paper, ways: "Parents and children here and elsewhere in the County of Inverness who have pupils attending must certainly appreciate the good, substantial educational work which is leing done here."

On Triday evening, December 2f, the students of Guysbero, N. S.. acalemy calleil upon their principal, Mr. W. W. Ilerdman, and presented him with a complimentary address and a hamdsome sterling silver writing set. Mr.

Herdman replied, thanking the students for their kindness and good-will. The attendance at the Guysboro Academy this year is the largest on record, many students coming from different points of county. Mr. Herdman is a Pictou boy, a snlendid teacher, and well regarded by those of whom he has charge.

The Fredericton Board of School Trustees have decided to introduce regular musical instruction in the public schools under their charge-a wise and progressive measure which it is hoped may be speedily followed in other communities.

Mr. Wm. R. Shanklin, recently a member of the staff of the School for the Deaf, Lancaster, has been appointed principal of the Newman street school, St. John. Mr. Shanklin has had considerable experience, and has shown much skill in teaching.

Mr. John G. MacKinnon has been appointed teacher of grade six, Leinster street school, St. John; not of the Douglas Avenue school, as stated last month.

## RECENT BOOKS.

One of the great needs at this and all seasons of the year is the Canadian Almanac for 1907, published by Copp. Clark \& Company, Toronto. The writer inquired for it at several of the city bookstores about the tenth of Jannary, and the reply was, "All sold out; another lot ordered." Everybody scems to need the concise summary that is found in this invaluable publication-the astronomical and meteorogical calculations, commercial reports of Canada, short history of the Dominion, Canadian banks and other public institutions, forms of government throughont the world, British army and navy, Canadian militia, post offices, and railroad stations in Canada, officials of all grades, and the clergy, lawyers, et als, of the Dominion and the provinces, cducational institutions, societies, Canadian tariff. and information of various kinds such as one needs every day from the first of January to the thirty-first December.

Messrs. Giun \& Company, Boston, publish two books that will prove of great benefit to students who wish a brief but clear view of history from the earliest times down to the present. The first is Myers's Short History of Ancient Times ( 388 pages, mailing price $\$ \mathrm{I} .25$ ), containing the first part of that author's General History. brought down to the period of Charlemagne. The secont is Myers's Short History of Mediæval and Modern Times (438 pages, mailing price $\$ \mathrm{r} .30$ ), the companion volum. to the History of Ancient Times, containing the recors down to modern times. These books should be in every school library, furnishing as they do an interestinv. authentic and concise account of the world's doings, available to every student.

Messrs. Geo. Philị \& Son, London, publish an Outline Elementary Atlas of Comparative Geography (price. one shilling), containing a series of 32 outline maps on draving. The series forms a very useful set of outlines for map drawing.
Messrs. Blackic \& Son, London, publish a Nafure-Knoze. lidge Diary, compiled with notes on nature-study by W. Percival Westell. These notes are very simple and concise, and the Diary is an excellent rade mecum to the

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young nature student. The publishers announce their intention of giving six prizes eacl year, each a beautifully illustrated natural history book, to those sending in the best kept Nature-Knowledge Diary, on the plan of their own publication. Some of our young nature-students should be competitors.

Messrs. Blackie \& Son, London, are publishing the greater flays of Shakespeare in neat red cover editions, without notes, price 4 d . each. The three of the series which have already appeared are The Merchant of I'enice, As You Like It, King Henry Fifth. The text omits everything undesirable in class reading.

Messrs. Blackie \& Son also publish in their "Little library of Pedagogics" John Dewy's The School and Child (price Is.), edited by J. J. lindlay, Professor of Education in the University of Nanchester.

## RECENT MAGAZINES.

That grand old magazine, the Atlantic Monthly, which celebrates its Jubilee this year, begins 1907 with an excellent number, varied to suit the tastes of its readers. No stories recently published in the Allantic have met with greater success than those ly S . Carleton, a resident of Halifax, Nova Scotiat. "The Lame Priest," "The Sound of the Axe," "The lirenchwoman's Son," and "The Whale" will be recalled with pleasure. The January Atlontic has an article by Professor Archibald MacMcelan of Dalhousie University which all readers and teachers of Longfellow's Evangeline should read. It is corrective.

Eight illustrated articles and four articles without illustration, all by specialists and writers of note, together with six short stories by leading writers of fiction in Canada, besides a liberal insertion of poetry and light material, is the programme furnished by the Canadian Magazine for the first month of 1907. Canadian Artists Abroad is an appreciation of the work of two eminent Canadian artists -Morrice and Hill, the latter a seulptor.

The persecution of the Prussian Poles, in connection with the attempt to Germanize the people of Prussian Poland by forcing them to use the German language in the schools for religious as well as secular instruction, has not attracted the attention in this country which its importance deserves. The article on this subject by "Posen" in The Living Age for January 5 describes the great school strike of Polish children to which this attempt has led.
The Delincator for February contains much lively reading matter in addition to its fashion plates: The Making of a Charming Woman, by an "Old Bean;" The Funniest Valentines, by the Funniest People; Talks on Homemaking, by Alice M. Kellogg; The Miller and the Mouse, by Grace MacGowan Cooke, and other bright articles and stories.

The Chautauquan is publishing a series of articles, of which numbers one and two have appeared in December and Jannary, chtitled "A Reading Journey in English Counties." The journey begins with the border and lake counties and will end with Cornwall. The articles are fully illnstrated, and so far have been of decided interest.

# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

| Published Monthly. | ST. JOHN, N. B., MARCH, 1907. |
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THE RUUCATIONAL REVIEW. Oplce, si Leinster Street, St. John, N. B.

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THE EDUCATIONAL REVIEW, St. John, N. B.

In the sudden death of Lieutenant-Governor Snowball, following so soon after the equally sulden death of Hon. A. G. Blair, New Brunswick loses two of her eminent sons, men of character and influence who have left their impress on their generation.

Hon. L. J. Tweedie, Premier and Provincial Secretary of New Brunswick, has been appointed Lieutenant-Governor of the province in place of the late Hon. W. B. Snowball. Hon.Wm. Pugsley has been called to the leadership of the provincial administration.

The official notice on another page from the Superintendent of Education in Nova Scotia contains some important announcements. Principal W. R. Camplell, M.A., after twenty years success ful work as principal of Colchester Academy, Truro, N. S, has been appointed inspector of
schools for the newly-created district Number Twelve - the county of Colchester. Hitherto the inspectorial work of Colchester, Cumberland and Pictou was found to be too heavy for the present inspectors, Inglis C. Craig and E. L. Armstrong, so the council of public instruction decided to make Colchester a separate inspectorial division, and Principal Campbell, after some hesitation, has accepted the position. Truro Academy has been one of the leading academies of Nova Scotia under the successful administration of Mr. Campbell, whose experience and abilities serve him well for his new position.

Mr. Stanley S. Bruce of Shelburne Academy succeeds Mr. James H. Munro as inspector of schools for Yarmouth and Shelburne counties. Mr. Munro retires after many years of faithful and efficient service. Mr. Bruce has proved himself a competent and successful teacher, and for many years has been a diligent student of the natural history of Shelburne County.

A federal conference on education will be held in London from May $24^{\text {th }}$ to June 1st. Its object is to promote the furtherance of the federation of the Empire in education. Representatives from all parts of the Empire are expected to take part in this important meeting. Chief Superintendent Dr. Inch of New Brunswick, and Dr. MacKay, Superintendent of Education for Nova Scotia, have accepted invitations to be present.

Dr. A. H. MacKay in an article in the Federal Magazme of London urges the desirability of a uniform system of nomenclature in connection with the agres and grades of pupils in primary and seconitery schools, not only throughout the Empire, Sut in all English-speaking countries. This, Dr. MacKay says, can only be brought about through the influence of some central agrency, such as the moposed convention, which, if it originate such a general co-operation, would be sufficient of itself to justify its assembling. Dr. Mackay is also contributing to the same magazine a series of articles on education in Nova Scotia.

## Glimpses into Schoolrooms - III.

## By the Editor.

A correspondent considers this series of talks on "Glimpses into Schoolrooms," as one of the most helpful and encouraging features of the Review, because few teachers have the opportunity to visit other schools, and "because many teachers, from long meditating on their own troubles in school, sometimes imagine that they are the only ones who have any difficulties. So, in your account of visits to schoolrooms do not give us only the bright side of the picture. Tell us some of the trials and troubles, and how they are overcome."
These records of visits to schools are intended to help teachers, and if the editor has so far strayed into the good schools, it was not intentional to do so, hut rather to take them as they come, and to afford glimpses not only of those recently visited, but to call up pleasant impressions-or otherwise-of school work seen in the past. It is much more pleasant to jot down the impressions produced by visiting a school where everything is in "apple pie order" than the reverse picture. There are two difficulties in the way in presenting the latter: In very many schools teachers and children do better work when visitors are present; if both are placed at a disadvantage and obviously embarassed by the presence of a visitor, the lessons drawn from failure may not be either happy or accurate. Again, the bad schools with harsh, unsympathetic teachers and impish, noisy children are rare,-at least the evidence points that way. If any correspondent will tell the Review of such a school it will be visited, if not too far away.

During a visit to a school a few months ago there was a recitation in geography. The pupils had their broks open before them. The teacher asked questions; the pupils answered after consulting their maps or books. There was 110 interruption to the cross fire of questions until the visitor volunteered one, which was answered readily enough. But it mattered little whether the question was answered correctly or not. The class had no evident interest in the work; there was no opportunity to think, compare, observe, for which the right study of geography is so well fitted; there was no history, current events, travel, incilent, or other companion subjects of geography to enliven the lesson. It was geography pure and simple, and so crudely conducted that it was charitalle to suppose that teacher and
pupils were merely putting in the time-it was the last half hour of the day.

No subject has been more changed in its methods of presentation during the last decade or two than geography. Instead of memorizing a mass of details, consisting of names of capes, islands, rivers, boundaries, etc., it is now recognized as a distinct branch of science and an important adjunct of nature-study. Its aim is first to make the pupils acquainted with home and its surroundings, and using these as a starting point to proceed to a knowledge of the world-its features, inhabitants, products.
A lesson given to a fourth grade class at a normal institute, which I attended in Eastern Nova Scotia a few years ago, will illustrate how interesting this subject may be made to young children, and how it may be used to train them to habits of observation and reading. The lesson was carefully prepared by a teacher and given as a model to other teachers present.
The teacher had not met his pupils until that morning. A few minutes were spent in obtaining from them what they knew about their surroundings: A village overlooking the Strait of Canso, some few facts about the occupations of the people who live there, and the products and industries of the place, with a few incidental references to the plants and animals found in the neighborhood. The teacher soon gained the sympathy of the pupils, by his own evident interest in all matters that they talked about, and by his offer to take them out that afternoon on an exploring trip.. Here was a teacher who volunteered after a few hours' acquaintance with the place (if I am correct in this opinion) to do what some other teachers hesitated to do after weeks or months spent in acquainting (?) themselves with the vicinity of their schools. The remaining time of the lesson was spent in drawing from the pupils their knowledge about the ships in the harbour, what they took away and what they brought back, and the same with the railway, with an imaginary journey on each, and the places probably visited. There were maps and pictures to illustrate these journeys, which though imaginary became very real under the influence of a live teacher.

Bear in mind that the purpose of this lesson was simply to draw from the pupils a knowledge of their surroundings and then to connect the people and products of their home with those of more distant places, without entering into too much detail. In these respects the lesson was indeed a model.

## Forestry.

The recent forestry convention held in Fredericton served to show the interest that is felt in New Brunswick concerning the care and preservation of its trees. Not only was there a large gathering of the representative men of the province, but men well versed in the science of forestry from Eastern Canada, and experts from Harvard and Yale were present to discuss the more technical aspects of the question. The members of the provincial parliament showed an intelligent interest in the proceedings. The legislature was adjourned, and the legislative chamber was occupied by the members of the convention during the two days that their important deliberations continued.

A hopeful feature of the convention was the evident interest felt in the education of those who are in future to have the care and control of the forests. As one expressed it, to make foresters you must catch them while they are young. Chancellor Jones of the University of New Brunswick outlined a course which might, with little change in existing conditions, and with little additional expense, provide a suitable education for those who have the science of forestry in view. In brief, a thorough course of engineering would be provided for during the first two years of a student's life at the University, and during tine last two years special instruction could be given in forestry. During the course of these students subjects which are more intimately connected with forestry, such as botany, chemistry, surveying and related studies would receive more special attention.

It was urged by one of the speakers that the sons of lumbermen and others who may not desire to take a full course should have the privilege of taking a shorter course; ancl no doubt provisions may be made for this, especially if the lumbermen of New Brunswick will contrilute towards an endowment for this purpose. At Yale University a request similar to the one noted above was made by lumbermen, and the answer was returned that if they provided for it such a course would be estal)lished. The lumbermen promptly made a gift of $\$ 150,000$. There is wealth and public spirit enough among the lumbermen of New Brunswick to respond just as readily to a call upon them to endow a chair of foyestry in the New Brunswick University, or at least to provide for an endowment covering a special course.

Dr. J. R. Inch, Chief Superintendent of Education, in dwelling upon the relation of forestry to our public schools, spoke of the advantage of naturestudies, and the observance of Arbor day in promoting an interest in and respect for trees among children.

Mr. T. B. Kidner, director of manual training, in his illustrative talk about trees and other plants, pointed out what the manual training schools are capable of doing in this direction. The collection of woods and drawings aroused much interest and attention among those present.

It is confidently expected that this convention, the direct result of which is the formation of a provincial forestry association, will do much good in directing attention to the need of better methods in lumbering and the care of forests in New Brunswick. No country in the world is better adapted in its natural condition for the growth of trees than New Brunswick, and the preservation of its forests should be one of the first duties of its government and people.

## Free - "The Dictionary Habit."

The publishers of Webster's International Dictionary have just issued a handsome thirty-two page booklet on the use of the dictionary. Sherwin Cody, well-known as a writer and authority on English grammar and composition, is the author. The booklet contains seven lessons for systematically acquiring the dictionary habit. While it is primarily intended for teachers and school principals, the general reader will find much of interest and value. A copy will be sent, gratis, to anyone who addresses the firm, G. \& C. Merriam Company, Springfield, Mass. Write to-day. The teacher will find it one of the greatest aids in getting pupils to do profitable work for themselves.

Professor I.ounsberry, discussing the question of simple English, said at Yale oue afternoon: "There was a little boy who began to keep a diary. His first entry was: ' Got up this morning at 7 o'clock.' He showed the entry to his mother, and she, horrorstricken, said: 'Have you never been to schonl?' 'Got up,' indeed! Such an expression! Does the sun get up? No; it rises. And she scratehed out ' (iot up at 7 .' and wrote ' Rose at 7 ' in its place. That night the boy, before retiring, ended the entry for the day with the sentence: 'Set at 9 o'clock.'"

## Nature Study in March.

By G. U. Hay.

March is the harbinger of Spring-indeed it is the first spring month according to the calendar, although in this northern climate of ours there is more of winter about it than spring. He is a variable fellow, this March, when the waning cold struggles with the waxing warmth, and when boisterous winds make no one regretful that Winter's reign is nearing an end. "As mad as a March hare," is an old English saying, and it might be suppose, if we judged from our blustering month, that the hare (or rabbit, as we call the species here) is goaded to madness by hunger or cold. But an old English writer tells us that March is the mating season for the hare, when he becomes excitable and violent as he feels the warm blood of spring pulsing through his veins.

The pale faces of the children who have kept too close to their books during the long winter begin to glow with the prospect of work in the school garden or a romp in the woods in search of early spring flowers, or listening to the carols of our old friends the birds, or the peeping of frogs after their long sleep in the mud, or other of those numberless sounds and signs of a returning spring.

What a delight it will be for those children to welcome back the little birds which come in ever increasing flocks to their native haunts in the north. Yes, their native haunts, for were they not born here, and are they not coming back to revisit their homes, to make new nests, and to carol gladly among the branches where first they looked out with wonder on this busy, work-a-day world?
"But when will our friends be here?" say the children. "When can we expect Robin Redbreast, or that delight of past summers, the Song Sparrow, or the Fox Sparrow, a joy to all lovers of birds music, and many other glad song birds?" No one can tell the precise time of their coming, so the word must be-wait and watch. Continued severe weather delays their coming. If warm weather prevails for several days they may surely be expected to fo!low in the wake of this warm wave. When the ice leaves our bays, ponds and rivers, the ducks and loons will appear, and wild geese in spreading Vslaped flocks, the air vibrating with their "honk, honk," so familiar to school boys, will be flying north again. But they do not come until the ice is out of the bays and estuaries to the north of us. (How tho they know? - but that is more than you or I can tell). They do not come until their food,
scarce at first though it may be, is ready for them; and so of the birds that prey upon insects. Nor do those birds with long sharp bills, like the woodcock, come until the earth is thawed sufficiently for them to search for their fare of earthworms.

The signs of spring are soon to be seen on the branches of trees. The twigs of maples and willows are putting on a deeper hue. The buds of some trees are beginning to grow red, and from day to day, warmed by the sun, begin to grow larger, and get ready to cast off their winter wraps. What are these buds and what do they contain? When were they formed? Why do they need coverings? What will they grow into? are questions that will oscur to every child at this season.

As the month draws to a close the little furry catkins on the pussy willow will be seen to have come further out during the warm days. Notice the catkins on the birch, the alder and the hazel trecs. Notice the other trees that are preparing to send forth their flowers. "Their flowers!" say the children; "do trees have flowers?" They do indeed, and most of trees bear their flowers in early spring. Look for them this spring on every tree that you meet.

One of the sounds of early spring will be the roar of streams and rivulets as they strive to break the bands of the ice-king. Watch the banks of some of these streams and even the rills that trickle by the roadsides. Notice the earth caving in, and see how muddy the water looks. Follow the course of this muddly water, and find out what becomes of the mud and gravel that these streams carry along. And that may tell you what changes have been going on upon this earth during the winters and springs of countless years of the past.

No Nature-study in March! Oh, yes; if we can get into the spirit of it there is plenty of material; and the first bird, the first sign of a flower, of a reddish twig or bud, will remind us of other spring advents. Thus we can refresh our spirits after the long winter and come into touch with the newest and gladdest spring it has been our lot to pass through.

I am pleased with the Review. It tells me just what I want to know, and helps me to keep out of ruts. I preserve each number forture reference. Wishing the Review and its editors many happy years in represcuting the educational interests of these provinces.

Joseph J. Ganel.
Gavelton, N. S.

## Our Picture for March.

Rev. Hunter Boyd, Waweig, N. B.

The subject selected by the editor for the March number of Educational Review, belongs to the class known as "Pictures that tell a story." It will appeal to youthful imagination, and more or less to a sense of humour. A title was hardly required, as the artist has conveyed the idea by his brush, but titles are sometimes a necessity in order to distinguish the works of one painter from those of another, or to fix the identity of his own. The language of emotional expression is practically the same in human life, and therefore if his observation is correctly rewarded it would matter little whether the characters introduced were Russian or Canadian. But the scene has a strong local flavour about it, and those who know London urchins will not only say it is true to human nature, but true to lite in some sections of the world's metropolis.

The exact location is not important. We see a portion of the pavement or 'sidewalk' alongside the high wall and railing of the grounds of a large institution. The boy doubtless has good reasons for taking his stand near the door which is seen behind him. It is late in the afternoon and as it becomes colder makes his chances of doing business more favorable. But his mind is not wholly devoted to serving customers, the opportunity for throwing snowballs is very tempting when the passers are so infrequent. To see a gentleman well-dressed, and more elderly than nimble, presents very strong temptation. Whoever threw the snow, made good aim for the largest amount of discomfort to the person who received the blow. It is possible that this boy can have done so. Judging the time which it would require for the victim to half turn his head, would the thrower be able to insert his hands in his pockets, look the other way, and commencing to whistle assume this air and hearing of innoccnce? The old gentleman is looking out of the corner of his eye-the boy is turning as far as he dares, and a psychologist would say there has been considerable emotional energy on the invisible line between those two eyes.

Allow the scholars to describe as exactly as possible the looks of the two persons-mischief, cunning, alertness and so on one side, and annoyance, anger, possibly fear of more attacks on the other. Endeavor to get lists of suitable words, and according to the grades of the scholars attempt to define the shades of meaning.

The picture will afford a good basis for a word study, and some may make it an occasion for discussion of the propriety of practical joking. Is this man typical of the kind that boys specially like to irritate.

It will be interesting to know the grounds on which scholars incline to believe the boy is not guilty.

Objection is sometimes made that pictures should not be analysed but enjoyed; but the title of this one positively invites discussion. Many scholars have not seen chestnuts roasted, certainly not in our streets. They are more familiar with the process of roasting peanuts. The teacher will do well to encourage them to search for accounts of London waifs and their modes of obtaining a scanty livelihood. Some may be found cager to draw the simple open-air stove with the chestnuts cracking open on the tray on which they are roasting. The clothing of the boy is typical of his class, but in strong contrast to Canadian lads in winter. Would such a boy make a good colonist?

The pieture suffers scarcely anything by reproduction as colours are not essential to success. Invite the o!der seholars to note the parallel lines throughout this upright rectangular arrangement, and to state if "unity" is secured in the picture, and in what manner?
Can any of the teachers recall references to 'roasting chestnuts' in English literature?
Answer to "Query for Review Subscribers" in February number: Mrs. A. bought 32 yards; her daughter (Amu) bought 31 yards; Mrs. B. bought I2 yards; her daughter (Jane) bought 9 yards; Mrs. C. bought 8 yards; her daughter (Eliza) bought I yard. C. E. Lund.
A solution was received from Mr. J. E. Belliveau, Pictou, N. S.

## March.

[^24]
# March and Its High Days. 

Eleanor Robinson.

The Roman name of this month was Martius from Mars, the god of war. A more appropriate name in our climate is that given to it by the AngloSaxons, who called it Hlyd Monath, that is, the loud or stormy month. Among the Romans the year began in March, and in the English calendar March 25 th was the first day of the year until 1752 . Thus in modern editions of Pepys' Diary we find, for example, the days from January ist to March 25 th, 1664, with the date of both years, 1663-4. Both in England and Scotland there is an old saying which represents March as borrowing three days from April, and the last three days of March are called "the borrowed days. The old rhyme says :

> "March borrowed from Averill, Three days, and they were ill."
and another runs thus:

> The first, it sall be wind and weet, The next, it sall be snow and sleet,
> The third, it sall be sic and freeze, Sall gar (make) the birds stick to the trees."

And everyone is familiar with the image of March "going out like a lion."

Dry weather in March is favorable to the grain crops, hence the saying "A bushel of March dust is worth a King's ransom.

We find the days of the patron saints of Wales and of Ireland in March. The first day of the month is sacred to St. David. There are many legends about this patron of Wales, but very little is really known of his life. He is thought to have been a bishop in Wales in the sixth century, and the date of his death has been put at 60 I A. D. His shrine is in the church at St. David's. In Shakespere's "Henry V," Lluellen, the Welshman, says to the king: "I do pelieve your majesty takes no scorn to wear the leek upon St. Tavy's day." And the king answers: "I wear it for a memorable honor, for I am Welsh, you know, good countryman."

The traditional explanation of the wearing of the leck is that King Arthur won a great victory over the Saxons in a garden where leeks grew, and that St. David ordered that every one of the King's soldiers should wear a leek in his cap in honor of the victory.

Around the name of St. Patrick, the patron saint of Ireland, has gathered a mass of legends, in which
false and true, beautiful and ghastly, foolish and instructive stories are brought together. This confusion is partly owing to the fact that the name Patricius seems to lave been commonly used in the sense of nobleman or gentleman. Moreover, another Patrick was sent to Ireland as bishop by the Pope about the time that the subject of this sketch began his work there. Irish writers mention also a third ecclesiastic of the same name, so that it is not surprising that the accounts of the saint have been confused. The following facts, however, are pretty generally accepted. St. Patrick was born in Scotland at or near Dumbarton, about the end of the fourth century, and of Christian parents. When a boy of fifteen he was taken prisoner by pirates and sold as a slave in Ireland, probably in county Antrim. Here he tended cattle for six years, and then made his escape, but he soon formed the plan of going back to Ireland as a missionary. Where and how he was trained for his work is not certain. He lived among his relations in Britain for some time, and they begged him not to leave them, but he could not forget the needs of the Irish people, and in dreams he heard voices calling him to come to them. At last his plan was carried out. He says, "Thanks be to God, that after very many years the Lord granted unto them according to their cry." For over forty years he worked in Ireland, traveling from place to place, and risking death and slavery, teaching, baptizing, and founding churches. Traditions all agree that he died on the 17 th of March. The year is uncertain, but 469 seems the most likely date; he was probably buried at Downpatrick. St. Partick was the first great missionary who went out from Britain, and this alone would commend his life, a holy and useful one, to our remembrance. The practice of wearing a shamrock on his dlay is thought to have begun from his habit of using the trifoliate leaf as an inrage of the Holy Trinity.

The $25^{\text {th }}$ of March has been kept since very early times as the day on which is commemorated the Annunciation of the Blessed Virgin Mary; that is, the event recorded in the first chapter of St. Luke's Gospet, of the Angel Gabriel's coming to the Virgin with the message that the Saviour of the world was to be born of her. This event has been a favorite subject with artists, and is portrayed in some of the most beautiful pictures in the world. The day is commonly called Lady Day.

The Festival of the Annunciation commemorates the promise of the coming of the Saviour, but a still greater event is celebrated this year in the same month, for Easter falls on the 31st of March. This festival of the Resurrection of Christ has been kept as the crowning feast of the year since very early ages. It is spoken of by ancient writers as "the most holy Feast," "the Great Day," "the Feast of Feasts," "the Queen of Festivals." The name Easter was in use as far back as the sixth century, and the Venerable Bede, the historian of the clurch in Britain, says thrat it is derived from the name of a pagan goddess, Eostre, or Ostera, whose festival came in the spring. Later writers say the name comes from a word meaning to arise. In oldEnglish calendars Easter is called "the Again-rising of our Lord." Among Eastern Christians it is popularly called "the Bright Day."

This name connects it with the idea of sunrise, and of the Sun of Righteousness rising from the darkness of the grave. The French name for Easter, Paques, is derived evidently through the Latin pascha from the Hebrew name of the Passover festival, and Easter eggs are called "pasque" eggs in some parts of England.

Easter may fall upon any day from March 22nd to April 25 th, inclusive. Its date is determined as follows: Easter Day is the first Sumday after the fourteenth day of the calendar moon which happens on or after the 2ist of March.

Most of the popular customs connected with Easter tide, such as the sending of flowers and of eggs, rising to see the Easter sun dance, the wearing of new clothes, are typical of the release from bondage, the coming from darkness to light, the beginning of a new life-all that the Resurrection of Christ means to Christians. Flowers are the most obvious symbols of the Resurrection, and lilies especially stand for purity. The sending of exgs. often coloured, is one of the most wide-spread customs of the season among Christian nations.

A prayer to be said before eating eggs, and belonging to the early part of the sevententh century runs thus:
"Bless, oh Lord, we beseech Thee, this thy creature of eggs, that it may becone a wholesome sustenance to Thy faithful servants, eating it in thankfulness to Thee, on account of the Resurrection of our Lord." Originally, Easter eggs were coloured red, the colour of bloorl, in commemoration of our Lord's death and passion.

Another favorite symbol of the rising from the
grave is the butterfly, and the connection of ideas here is quite plain. Not so in the case of the hare, which appears so commonly upon Easter cards, and in different forms in the shop windows. This symbol seems to have been borrowed from Germany, but no perfectly satisfactory explanation of it is to be found. The Easter hare is supposed in German superstition to lay eggs, and to bring coloured eggs to good children on Easter morning.

## Rockfeller's $\$ 43,000,000$.

One can get no idea of what $\$ 43,000,000$ means, but this is the amount set apart by John D. Rockefeller for the benefit of higher institutions of learning in the United States. Presumably each donation will mean the giving of more than as much more by other men and women of large wealth, so that $\$ 100,000,000$ will go to these institutions. It is said that the $\$ 43.000,000$ are so invested as to give an annual income of about $\$ 6,000,000$. This would mean the giving of $\$ 100,000$ a year to sixty different colleges. What a thought!-N. E. Journal of Education.

May we not look at it from another point of view. If the income were applied to creating or assisting teachers' pension funds, it would mean the giving of $\$ 100,000$ a year for that purpose to every state of the United States, and to every province of Canada. This would be a beginning at the right end. It is not that too much money is given to colleges, but that too little is given to improve the conditions of elementary schoo!s and teachers. In Canada Sir William Macdonald has shown how wealth may be devoted wiscly to raise the status of country schools and teachers, as well as to bencfit colleges.

Says the University of New Brunswick Monthly: "What will our authorities do for the maintenance of the chair of chemistry? . . . Through the generosity of Sir William MeDonald, and the goodwill of Dr. Brittain, we have enjoyed for more than two years a course in chemistry that has been thoroughly up-to-date. . . . We cannot speak too highly of the work of Dr. Brittain. His ability as a teacher, his range of knowledge of the subject, and the energy he has displayed mark him as the man we want. We undergraduates say that he is the kind of a professor that U. N. B. cannot afford to lose. No course has become more popular than this one, no lectures more eagerly listened to, and no iaboratory work less laborious and more success fully eonducted. No armangement short of maintaining the present high standard will be weleomed by the student body."

Students are apt to be pretty good judges in matters of this kind, and in their estimate of the work of Dr. Brittain the Review heartily agrees.

GEOMETRICAL DRAWING GRVIII.


## Geometrical Drawing - IV.

## Principal F. G. Matthews.

The problems here given for grade VIII, although few in number, contain sufficient principles on which to base plenty of exercises to cover the year's work. Many of these may be found in the publication mentioned last month, and in past examination papers. If further practice is required, good exercises may be given in copying, enlarging and reducing given figures, using all kinds of scales.

Fig. I. The diagonal scale, its construction and use. To explain the construction of this most useful scale, let $A B$ in the first diagram be a short line which is to be divided into twelve cqual parts. Draw AC any length, stepping off on it twelve equal divisions. Join CB and from the divisions on AC draw lines a1, b2, etc., parallel to AB .

Since $A f$ is half $A C, f 6$ will be half $A B$; and since Ci is one-fourth of AC , i9 will be one-fourth of AB . Similarly $\mathrm{k}_{11}$ is onc-twelfth of AB , and e 5 seventwelfths, and so on. This method of division is extremely usciul when AB is a very short line. In the second diagram we have a true diagonal scale in which the inch is divided into 120 parts, giving a scale of to fcet to the inch from which we can measure feet and inches.

To construct it draw AB any required length marking off each inch. Divide the first one $A E$ into io equal parts. Draw $A C$ at right angles to $A B$ and on it mark off twelve equal divisions. Through each one draw a line parallel to AB . Draw EF, GH, etc. parallel to $A C$. Divide CF into ten equal parts. Join Fa, rb, 2c, etc. These lines are diagonals and divide each tenth of AE into twelve equal parts.

Suppose we wish to measure off a line 26 feet 7 inches long. From K to 6 on the bettom line represents 26 feet. By going up the line Gy to the parallel marked 7, we add seven-twelfths of another foot, so that the distance xo represents 26 ft .7 in .

By using ten parallels instead of twelve we divide the inch into roo equal parts, and can obtain fractions of the inch to two decimal places.

Fig. 2. The seale of chords, its construction and use. With any convenient radius describe a quadrant $A B$. With the same redius trisect the are. By trial divide each of these thirds again into three giving nine divisions, each representing ten degrees. With A as centre and radius Aa draw the arc aro. Similarly draw bzo, c3o, etc.

This divided line $A C$ is the scale of chords. The second part of the figure shows its use. It is re-
quired to make an angle of $37^{\circ}$ with DE. With D as centre and radius A60 on the scale describe the $\operatorname{arc} \mathrm{EF}$. With radius $\mathrm{A}_{37}$ and centre E , cut off point F. Join DF. Then EDF contains 37 degrees.

FIg. 3. To construct an irregular polygon, having given lengths of sides and sizes of angles. Draw $A B$ and make it the given length. By means of protractor or scale of chords make the angle ABC the given size. Cut off $B C$ the required length and proceed in a similar manner with each side and angle until the figure is complete.

Note.-In this and the succeeding figures which have climensions, the scale used is Ioo yards to the inch. This is an easy scale, and can be worked with great accuracy from a diagonal scale.

Fig. 4. The same as Fig. 3, having given the lengths of sides and diagonals. Make the triangle ABC according to dimensions given (by Ex. 4 grade VII.) Then on CA make the triangle CDA by the same method. Next construct the triangle DEA on DA and the figure will be complete.

Fig. 5. The same as Fig 3, having given two sides, lengths of lines radiating from one corner, and the angles between them.

Draw PA its given length. Make the angles BAC, CAD, and DAE of the given number of degres. Cut off $\mathrm{AC}, \mathrm{AD}$ and AE the given lengths, and join $\mathrm{BC}, \mathrm{CD}$ and DE .
Fig. 6. The same as Fig. 3, having given lengths of radii from a point within the figure, and the angles between them. Draw BO the given length. Make the angles BOC, COD, DOE, and EOA of the required number of degrees. Next set off the lengths of the radii, and join their extremities.

Fig. 7. The same as Fig. 3, by means of ordinates from one side, or the side produced. Draw any line fh and set off $\mathrm{fA}, \mathrm{Ag}, \mathrm{gE}$, and Eh their respective lengths. At $f, g$, and $h$ erect perpendiculars (called ordinates) and cut them off to required lengths. Join $A B, B C, C D$, and $D E$.

Fig. 8. The same as Fig. 3, by means of ordinates from a diagonal. Draw the diagonal AB and mark off the different divisions from the table. Erect the ordinates and cut them to lengths. Join the extremities.

Fig. 9. To construct an irregular figure from dimensions given as in land surveying. The right hand portion of the figure represents a page from a surveyor's Fick-book, which should be read from the bottom upwards.

Draw AB rising $1114^{\circ}$ from the horizontal (each
point of the compass being $111 / 4^{\circ}$ ) making it the required length, 420 yards. From A to a is 119 yards at which point there is a set-off to the left of 21 yards. From A to b is 195 yeards, where another set-off of 96 yards to the left is found. BC being 192 yards and AC 479 , construct the triangle ABC , noting that BC turns to the right from AB , and on BC and CA mark off the ordinates from the table as before. Join the points of the triangle and extremities of the ordinates to complete the figure.

After completing the drawing the children may be allowed to compute the area of each part of the figure, and of the whole. To allow of the simplest method of getting the area of triangle ABC , the perpendicular height is given from $B$.

Fig. 1o. To draw a tangent to a circle from a given point in the circumference. Join A the given point to the centre $O$. At $A$ draw $A B$ at right angles to $A \bigcirc . A B$ is the tangent required.
Fig. II. The same as Fig. io, from a point outside the circle. Join the point A to the centre O . Bisect AO in B . With B as centre and radius BO describe a circle cutting the circumference in C and D. Join $A C$ and AD. Both these lines are tangents to the circle.

Fig. 12. The same as Fig Io, from a point in the circumference, but without using the centre. From A the given point, draw any chord AB . Bisect it in C and erect perpendicular CD. Join AD. Nake the angle DAE equal to the angle DAC. AE is the tangent required.
Fig. 13. This exercise is designed to shew a practical application of problems on tangents. $A B$ represents a piece of straight railroad track. Another straight road approaches C. It is required to form by a natural curve a junction at D . AB being tangential, a perpendicular from D will give one locus of the centre. Join CD. Bisect this chord and produce. This will be another locus. The common one is $E$, which is the centre of the curve.

We are living out these lives of ours too much apart from God. We toil on dismally, as if the making or the marring of our destinies rested wholly with ourselves. It is not so. We are not the lonely, orphaned creatures we let ourselves, suppose oursclves, to be. The earth, rolling on its way through space, does not go unattended. The Maker and Controller of it is with it and around it and upon it. He is with us bere and now.-Nelson $H$. Huntington.

## A History Device.

The use of scrap books has become so well known and so useful in geography that it suggested itself in history and has proved equally successful in that subject. The greatest handicap, especially to the country teacher, is the lack of time, but this may be overcome largely by a little planning, and letting the pupils do most of the work, which greatly enhances its value.

An old composition book makes a good scrap book. Cut out part of the leaves to allow for the added thickness of the pictures. The pupils may be aided a little in collecting the pictures, but as far as possible let each child collect and classify his own pictures, only giving a little advice or a few suggestions as to the topic. Each day's lesson may be taken as a topic, if there is time; for example, when the class is studying some battle, as the battle of Gettysburg, let each try to find pictures illustrating this battle; many such pictures may be found in old magazines. This brings the lesson more clearly before the mental vision, keeps it in the mind longer, and creates an interest.

Pictures of the noted statesmen may be used as they come in the lessons, and a brief sketch of the life of each learned in connection with the picture. Pictures of old historic buildings, forts, ctc., all help in making the subject interesting. The children never tire of them, and vie with each other as to who can bring the most practical and useful pictures, and who can picture out the topic in the most graphic manner.

Another aid in the study of history is map-drawing-drawing maps of each section of country as brought into prominence in the lessons. This also helps in making history real. In the wars the maps are drawn, then the routes of the different armies are traced in colored crayons, a different color being used for each army. The best of these maps are saved and put into the scrap books.
History studied in this manner is much more real to the pupils than when studied by merely committing to memory the words of a text-book. Approximate dates are associated with nearly every picture, so that time and places are permanently located in the mind, and looking over the'scrap book when completed gives a quick review of the entire term's work. This method is especially helpful in seventh grade history.-Popular Educator.

## Art in the Netherlands.

By Mrs. A. Maclean.

The art of the Netherlands is the art of Belgium and of Holland, represented by the Flemish school and the Dutch school. Obscurity shrouds the beginning of art in the Netherlands. Though there were examples of more or less merit previously, it was not until the beginning of the fifteenth century that a distinct Flemish school arose under the leadership of the Van Eycks, Hubert, Jan, and a younger sister, Margaret. With their advent the Flemish school at once became prominent. Hubert was born in 1366, and he and Margaret died about the year 1426 . Jan died in 1440 .

Flemish art may be said to begin in the fourteenth century and end in the seventeenth century. Fromentin says of Flemish art in this period: "At the two extremities of this brilliant course we are struck with the same phenomenon-rare enough in such a little country-we see an art which was born of itself, on the spot; and an art which was born again when it was thought to be dead. Van Eyke is recognized in a very fine Adoration of the Magi; Memling is suggested by certain portraits; and there, at the very end, a hundred and fifty years later, Rubens is preceived-each time a sun rises and then sets with the splendor and brevily of a beautiful day without a morrow."

The 'Van Eycks established thenselves in Ghent in 1420, among a corporation of painters then existing there." The triptych of St. Bavon is their work, but it is not known what part each painted. Their work was wonderful for the time, and it and the works of their pupils display the qualities that have since been considered characteristic of the entire Flemish school-tendency to naturalism, imitation of nature, sersitiveness to color at the expense of purity and grace of line, accuracy of finish, and, in the : earlier period, profound religious feeling. Hubert Van Eyck is credited with the discovery of the mixing of oil colors, and the applying them to canvas much as we do now. This discovery, long and carefully guarded by the Van Eycks, drew immediate attention to them and their works.

Memling, who painted about forty years after the Van Eycks, was perhaps the greatest of the earlier painters of Flanders. In his theme and manner he was much like the Van Eycks, but his was an advance. They copied nature accurately with an echo of the engraver and the enameler in their style ; he copied accurately, but he idealized. They have the gleam of gold, the polish of marble, the brilliant
carpet tints, the sheen of velvet and pearl; Memling has all these, but in his work are misty passages and half-tints of which the Van Eycks knew naught.

It is wonderful that, in a time so marked by violence; stratagem, superstition, dissoluteness, ecclesiastical parade, royal pageants, feasts, carousals and glitter of gold and gems, there should have. sprung into being a wonderful and unexpected artlife.

In its social and religious character, Flemish art stands between the art of Italy and the art of Holland. The influence of the church is seen throughout the whole of Italian painting in its best period, and never more conspicuously than when the faith of the people was beginning to fail. In Flemish art one sees rather the influence of religion than of the priesthood. There is a sturdy national characteristic about it, and a leaning toward literal reproduction of subject.

In the sixteenth century there began a gradual decline in Flemish art, due to the powerful influence of Italian renaissance. In striving to imitate :1 foreign art, with which it had no real sympathy, Flemish art ceased to be national. This decadence was checked in the seventeenth century by the advent of the greatest of all Flemish painters, Rubens. He formed a school of his own, and in that school the greatest pupil was Van Dyck.

After the death of Rubens and the dispersion of his pupils, the art of Flanders ceased to form a distinct school; and when Rembrandt arose, the artcentre of the Netherlands was transferred to Holland.

The works of the Flemish artists are to be found in galleries everywhere. Some of the more important artists are: Hugo van der Goes, $1 \neq 82$ : Geerardt David, ${ }^{1} 455^{-15} 53$; Jan Gossart de Mabuse, $1470-$ 1532; Paul Bril, 1556-1626; Jan Fyt, 1609-1691; Casper de Crayer, 1582-I669; David Teniers, 15821649; Jan (called "velvet") Breughel, 1589-1642; Aelbert Cuyp (Kuyp), 1606-169I; Jacob Jardaens, 1523-1678; David Teniers (younger), 1610-1694; Pieter van der Faes (Sir Peter Lely), 1618-1680.

In the Metropolitan Museum, Central Park, New York, are many paintings of the Flemish school. To the casual observer most of them are not calculated to arouse a great deal of enthusiasm. I have heard visitors in the museum remark, "Never mind these queer old pictures, let us go and look at the modern pictures." But there is a wealth of interest and beauty in those old Flemish paintings, albeit one might find lack of refinment of feeling, or even
a touch of actual coarseness in some of them, for some of the artists were frequenters of taverns. But if my space permitted, I should like to speak of the animals of Jan Fyt, the coloring of Teniers, etc., but 1 shall content myself with sketches of the 'two most famed of Flemish painters, Rubens and Van Dyck.

## Sarah's Teachers.

They taught side by side; one, an enthusiastic, warm-hearted woman, possessing a love for her work and a keen insight into luman nature; the other, scholarly, methodical, sarcastic, convinced that all human twigs could and should be bent in the same direction. One gained the love and affection of some forty-five fifth grade pupils; the other, the respect and obedience, born of fear, of as many sixth grade pupils. Into the latter grade came Sarah, a girl, who, unfortunately, had never learned the lesson of self-control.

Bright she was and interesting, but from the first misunderstood and misjudged by "Miss Method." Rebellious, self-willed Sarah! She absolutely refused to be moulded after the approved pattern. (There was actual danger of the mould being broken). Just as determined that this self-same mould remain intact, that not even a crack appear, was the firm " Miss Method."

Under such circumstances, things soon reached a crisis. On a memorable morning, hot-headed Sarah, goaded to the point of desperation by the cool, sarcastic tongue of the presiding genius of the room, struck her. In the passionate burst of anger she hissed, "I hate you! I hate you as you hate me! so there!" Hastily the principal was summoned; the culprit, her whole form shaken with suppressed sobs, taken to his sanctum sanctorumthe office.

There the child sobbed out her side of the pitiful story. (He already knew the other side, and wise man that he was, read much between the lines). But what to do. Suspend her? A child of that age? Not to be thought of. Had not the child sobbed out, "Please, Mr. Day, take me out of that room, I can't be good there." Had he not also heard frequently of late that Sarah was falling behind in her classes, that she could not be interested in her work: He would give her to his resourceful fifth grade teacher. The shanc of it! Demoted because a tactless woman could not win a lovable heart.

The next morning it was with a feeling of nis-
giving that Miss C. admitted to her busy hive "the drone" of whom she had so often heard. Had not her next door neighbor kept her fully posted on the short-comings of this vixen?

But was this bluc-eyed, frank-faced girl, sitting there so quietly, as black as she had been painted? She should have the benefit of the doubt. (All Miss C.'s children had to prove themselves bad before she would admit it). Had this slender girl only yesterday viciously struck a teacher? Such thoughts ran through Miss C.'s mind as she assigned lessons and directed her new pupil to the seat she was to occupy -one in the rear of the room-she had formerly occupied a front one, then left her to herself while the regular work was resumed.

The child quickly adjusted herself to the new environment-several days passed without an out-break-things seemed going well, when all at once, the unexpected happened! A frightened mouse ran across the floor and stopped, of course, in front of Sarah! Her book flew one way; she went the other. A hearty laugh entered into by teacher and pupils alike, was enjoyed; then all quieted down; no, not all. Sarah was giggling; a low, irritating, continuous giggle unnoticed for a time, then Miss C. stepped to her side, and "Stop as soon as you can, please, you are annoying others," was the lowspoken command. As if by magic, the giggling ceased; a kindly nod of approval was the reward.

In this tactful way, many bad habits were broken, many evil tendencies checked. How could they flourish in this wholesome atmosphere? By a little investigation it was discovered that Sarah possessed a sweet soprano voice that rang out strong and true in the chorus work for which the room was noted. She was appointed leader, a much coveted position among the pupils. By accident, as it were, many other schoolroom responsibilities devolved upon her.

Not in a day did she gain self-control-far from it. Many times she stumbled and fell; many were the battles fought and won in the conflict. but in the end, guided by the strong, sustaining hand of a wise teacher, she gained a glorious victory-the victory over self.-Primary Education.

A lawyer talked four hours to a jury, who felt like lynching him. His opponent, a grizzled old professional, arose, looked sweetly at the judge, and said: "Your honor, I will follow the example of my young friend who has just finished, and submit the case without argument." Then he sat down, and the silence was large and oppressive.

## Frobel's Educational System.

Mrs. C. M. Condon.

The principles and practice of the kindergarten have been found so adninably adapted to the infant in the home, and to the child from three to seven years old, under the fostering care of a kindergartner, as a preparation for school, that the very success of Froebel's "latest thought" has overshadowed his fame as a reformer of education as an organic whole.

Those who have carefully studied his "Education of Man" will not dispute this statement. This noble work was published in 1826, when its author, by his wide and varied culture and experience, was thoroughly equipped for his task. In it he sets forth his ideal of the ultimate aim of education, and points out the laws, upon the fulfilment of which success must depend. The careful study of this book by parents and teachers would dissipate many false and superficial notions of education.
Frobel's system rests upon the solid ground of the unity of law. Love for his kind, the "enthusiasm of humanity," led hiur to lay such stress upon this fundamental law of unity, and to demand its application to training and instruction in the family and school. His own early introspection and selfanalysis, and the secing and hearing the disagreements and troubled questionings, brought by parishioners to his father, their pastor, for settlement, gave the thoughtful boy a painful sense of the conflicting elements of human life. He felt that there must be somewhere a provision made for their reconcilement. To find the solution of this problem, in other words, how to help his fellow-men by correct methods of ellucation, to bring themselves into harmony with nature, man and God, was the life-work to which he felt himself called.

All fruitful education has proceeded from a more or less conformity to this law of unity. Even a partial recognition logically results in an endeavor to adapt methods of training and instruction, not simply to a plan, formed, largely, for the convenience of carrying on school work smoothly, but tends to a sturly of those laws which lie implicit in human nature, and visit with penalty those who ignore them.

We are to find out not only what branches are to be taught, but also when, how and why. We are to learn this by our own careful observation, and by the experience of those who have made the subject the study of their lives.

We must also consider the mental appetite, at a
given period, whether it is in a normal condition, and what pabulum will meet its requirements.

Too often, we shall find, through neglect, or satiety, or many other conceivable causes, no mental appetite, or at least none for what we wish to offer. It is this inactivity of mind that makes the work in our primary schools so difficult for the faithful teacher. Severity in such cases is a blunder, if not criminal. Consider the way in which we deal with physical inappetency; how cautiously we proceed; how we tempt and coax the appetite with well-prepared food, skilfully adapted to the abnormal condition of the patient. What a delight to mark appetite growing by what it feeds upon! Shall we then take less pains with the immortal mind? Shall we rob ourselves of the joy of watching the happy, normal growth of a mind which we have helped to lift up out of the slough of inaction by our wise and kindly ministration?

Enconraged by success we study, more and more diligently, the laws that govern us in our physical relations; and just so fas as we obey them, we increase our physical well-being.
When we are equally diligent in our efforts to understand and obey those laws which govern our mental and spiritual being, and which we must understand and obey, if we are to secure the best fruits of education, we shall then reap a still richer and fuller harvest. Meanwhile let us study these pregnant words of Gœethe: "Only in limitation is the artist seen, and he only is free who is the servant of law."

A correspondent asks:

1. Where is the harbour known as Simon's Bay?
2. What is correct pronounciation of Kouchibouguac?

Answers:

1. There is a harbour in Cape Colony, South Africa, known as Simon's Bay.
2. Koosh-ce-boo-gwak, with the accent on the first and last syllables.

Through the kindness of a friend I have become acquainted with the Review, and can think of no better way of showing my appreciation than that of subscribing. Enclosed your will please find one dollar for one year's subscription.

Frank B. Fox,

[^25]
## Avogadro's Law.

By John Waddell, Ph.D.
The importance of Avogadro's law is indicated by the papers in chemistry set at the provincial examinations of Nova Scotia last July. There were three questions out of a total of fourteen in which the principles involved were a feature. Avogadro's law should more strictly be called an hypothesis, not being like Gay Lussac's law regarding the proportion by volume in which gases unite, a generalization of facts. So many facts, however, can be easily understood if Avogadros lyypothesis is assumed to be correct, that it is scarcely looked upon as an hypothesis. It was, to a certain extent, a lucky guess on the part of Avogadro, because he had a very limited knowledge of the facts bearing upon the case. The guess was, on this very account, to a certain extent, unlucky, because Avogadro applied this law to cases where it was not applicable, and so for nearly fifty years the law was neglected, and it was only when its limitations were properly recognized that its uscfulness became evident.

The law in modern form is: "Equal volumes of all gases under the same conditions of temperature and pressure contain the same number of molecules."

The existence of molecules is assumed, though nobody has ever scen a molecule. Setting out with certain assumptions regarding the character and motion of molecules, Avogadro's law follows as a mathematical consequence, but of course the mathematical deduction is no more valid than the hypothetical premises.

On the assumption that Avogadro's lucky guess represents the facts, let us see some of the consequences.

In the first place there is no distinction made between elementary gases and compound gases. In a given volume, say a cubic font of hydrogen, there is the same number of molecules as in a cubic foot of hydrochloric acid gas; in a litre of nitrogen there is the same number of molectles as in a litre of ammonia in ten liters of carbon monoxide or carbon dinxide there is the same number of molectules as in ten liters of oxygen, or hydrogen, or of chlorine.

This leads, in the sccond place, to the result that the relative weights of equal volumes of different gases give the relative weights of the molecules: for if a litre of ammonia containing, let us say, a million, million, million molecules of ammonia weighs $81 / 2$ times as much as a litre of hydrogen.
which, according to the law, would also contain a million, million, million molecules, it follows that one molecule of ammonia must weigh $81 / 2$ times as much as one molecule of hydrogen. We do not know the absolute weight of a molecule of hydrogen, or of a molecule of ammonia, but it follows from what has been said above that an ounce, or a pound, or a gramme of hydrogen will occupy the same volume as $81 / 2$ ounces, or pounds, or grammes of ammonia, the same conditions of temperature and pressure being maintained in both cases.

Hence, in the third place, it follows that the formula given to gases may represerit a definite volume of the gascs, and that the formula which represents the molccule may also represent a perfectly definite volume, which will be the same for all gases.

The question now arises: What volume is to be represented by the formula of a gas? The volume may be chosen as the volume occupied by an ounce, or a pound, or a ton of some particular gas, say hydrogen. None of these volumes is chosen, however; in ordinary chemical work the French system of measurement being more common. The volume occupied by a gramme of lydrogen might be employed, and this was in fact used for some time. But if this volume is used as the standard, the formula representing ammonia should represent $81 / 2$ grammes, of carbon monoxide 14 grammes, of hydrochloric acid 18.25 grammes. The usual formula for ammoniais, however, $\mathrm{NH}_{3}$, nd if H represents one gramme, $N$ will necessarily represent I4. and $\mathrm{NH}_{3}$ will represent 17 , or twice the number of grammes in the volume chosen. In the same way the formıla CO usually given to carbon monoxide, and the formula HCl given to hydrochloric acid would represent trice the weight of the gases contained in the volume chosen. If we are to retain these formule it will be necessary to adopt as the standard volume the volume occupied, not by are gramme of hydrogen, but by two grammes. The formula for hydrogen, then, would be $\mathrm{H}_{\mathrm{g}}$, of nitrogen, $\mathrm{N}^{2}$, and of oxygen, $\mathrm{O}_{2}$. Arogadro's law would thus lead to the result that the molecule of hydrogen consists of two atoms, and the same wonld hold for a mmber of other elementary gases.

Avogadro's law may be applied in another way to arrive at this result. It is found by experime't that one volume of hydrogen uniting with one volume of chlorine gives trio volumes of hydrochloric acid gas. According to Avogadro's law there must be therefore twice as many molecules
of hydrochloric acid gas as of the hydrogen, or of the chlorine entering into its composition. But each molecule of hydrochloric acid must contain at least one atom of hydrogen and one atom of chlorine, and so there must be at least twice as many atoms of hydrogen as there are molecules of hydrogen, and at least twice as many atoms of chlorine as there are molecules of chlorine. If the formula for hydrochloric acid is taken as HCl , the formula for hydrogen is $\mathrm{H}_{2}$. If $\mathrm{H}_{2} \mathrm{Cl}_{2}$ were the formula for hydrochloric acid, $\mathrm{H}_{4}$ would be the formula for hydrogen. Neither the hydrogen nor the chlorine of hydrochloric acid have been found capable of division, and for this and other reasons the formula for hydrochloric acid is taken to be HCl .

Though in a manner similar to the above, it can be proved that a number of elementary gases contain two atoms in the molecule, there are elements whose molecules contain only one atom, and some whose molecules contain more than two atoms.
The best volume, then, to use as the standard volume is the volume occupied by two grammes of hydrogen, which at the temperature of $0^{\circ} \mathrm{C}$ and the pressure of the atmosphere 760 mm . of mercury is 22.412 litres. The molecular weight in grammes of each gas, then, occupies 22.412 litres under standard conditions. If a new gas is discovered its molecular weight is ascertained by determining the weight of 22.412 litres of $i t$. This is, of course, a matter of experiment.

Last July the question was asked in Grade XII: "How may Avogadro's law be used to establish the formula $\mathrm{H}_{2} \mathrm{O}$ with $\mathrm{O}=16$ as better representing the molecular formula of water than HO with $\mathrm{O}=8$ ?" There were only three candidates who had any measure of success with this question, though it is really very easy when the principle is muderstood. If $\mathrm{H}_{2} \mathrm{O}$ is the formula for water vapor, it follows that a volume of water vapour will weigh nine times as much as the same volume of hydrogen, since the formula of hydrogen is $\mathrm{H}_{2}$, the conditions of temperature and pressure being of course the same in both cases. If the formula is HO with $\mathrm{O}=8$, water vapour will weigh four and a half times as much as the same volume of hydrogen. It is found that the ratio of the weight is nine to one, thus establishing the formula $\mathrm{H}_{2} \mathrm{O}$ with $\mathrm{O}=16$.

In Grade X there was the question: "What volume is represented by the formula of a gas? Given the equation $\mathrm{MnO}_{2}+4 \mathrm{HCl}=\mathrm{MnCl}_{2}+$ ${ }_{2} \mathrm{H}_{\mathbf{2}} \mathrm{O}+\mathrm{Cl}_{2}$ how many litres of chlorine at stand ard temperature and pressure can be obtained from 87 grammes of manganese dioxide."

As we have seen, the formula of a gas represents
a perfectly definite volume, namely, 22.412 litres at zero centigrade and atmospheric pressure. (In "A School Chemistry" the volume is given as 22.253 litres, but fater investigations give 22.412 litres as more correct. The discrepancy is due to the difficulty in weighing gases, because of the large volume for a small weight).
The volume represented by $\mathrm{Cl}_{2}$ is therefore 22.412 litres, hence 22.412 litres of chlorine are obtained from the weight of manganese dioxide represented by $\mathrm{MnO}_{2}$. This weight is 87 grammes since Mn represents 55 grammes of manganese, and O represents 16 grammes of oxygen. The equation gives the data at once for answering the question; if the problem had been to calculate the volume of chlorine obtainable from 100 grammes of manganese dioxide, or from 200 grammes, or from any uther number, a very little arithmetic would be necessary. And here I may say that chemical arithmetic is no harder than any other, and it is just as easy to calculate about litres of oxygen as about tons of hay.

In Grade XII the volume of sulphuretted hydrogen obtainable from 100 grammes of ferrous sulphide was required at 730 mm . pressure and $20^{\circ} \mathrm{C}$.

From the equation $\mathrm{FeS}+\mathrm{H}_{2} \mathrm{SO}_{4}=\mathrm{FeSO}_{4}+\mathrm{H}_{2} \mathrm{~S}$ it appears that from 88 grammes of ferrons sulphide 22.412 litres of sulphurated hydrogen are obtained, because FeS represents 88 grammes and $\mathrm{H}_{2} \mathrm{~S}$ represents 22.412 litres. The gas is supposed to be measured at zero centigrade and at atmospheric pressure, namely, 760 mm of mercury. As the measurements in the problem are made at $20^{\circ} \mathrm{C}$ and 730 mm ., a correction must be made, and the calculation worked out for 100 grammes ferrous sulphide instead of 88 grammes.

It will be noticed that since ferrous sulphide is a solid, its volume is not indicated by the formula; it is only in the case of gases that the formula indieates the volume as well as the weight. FeS represents 88 grains, $\mathrm{H}_{2} \mathrm{~S}$ represents not only 34 grammes but also 22.412 litres at the standard temperature and pressure. The weight does not vary with temperature and pressure; the volume does.

An old colored woman was serionsly injured in a railway accident. One and all her friends urged the necessity of suing the wealthy railroad corporation for damages.
" I 'elar to gracious," she scornfully replied to their advice, "ef I ain't done git more'n nuff o' damages! What I'se wantin' now and what I'se done gwine to sue dat company foh is repairs." Cleveland Leader.

## Natural History for Little Folks. <br> The Story of the First Snowdrops.

An old man sat alone in his house. It was full of shadows; it was dark and glooiny. The old man cared nothing for the shadows or the darkness, for he was thinking of all the mighty deeds that he had done. "There is no one else in the world," he muttered, "who has done such deeds as I," and he counted them over aloud. A sound outside of the house interrupted h:m. "What can it be?" he said to himself. "How dares anything interrupt me? I have told all things to be still. It sounds like the rippling of waters, and I have told the waters to be quiet in their beds. There it is again. It is like the singing of birds, and I have sent the birds far away to the south."
Some one opened the door and came in. It was a youth with sunny curls and rosy face.
"Who said you might come in?" muttered the old man.
"Did not you?" asked the youth, with a merry little laugh. "I am really afraid that I came without asking. You see, every one is glad to see me and "-
"I am not," interrupted the old man.
" I have heard rumors of your great deeds," said the youth, " and I came to see whether the tales are true."
"The deeds are more true than the tales," muttered the old man, " for the tales are never great enough. No one can count the wonderful things I have done."
"And what are they?" asked the young man gravely, but witl a merry little twinkle in his eyes that would have made one think of the waves sparkling in the sunlight. "Let us see whether you or 1 can tell the greatest tale."
"I can breathe upon a river and turn it to ice," said the old man.
"I can breathe upon the ice and turn it to a river," said the youth.
"I can say to water, 'Stand still,' and it will not dare to stir."
"I can say, 'Stand no longer,' and it will go running and chattering down the mountain side."
"I shake my white head," said the old man, " and snow covers the earth."
"I shake my curls," said the yonng man, "and the air sparkles with sunshine. In a moment the snow is gone."
" I say to the birds, 'Sing no more. Leave me,' and they spread their wings and fly far away."
"I say, 'Little birds, come back,' and in a moment they are back again and singing their sweetest songs to me."
"No one can count the leaves," said the old man, "but whether I shake the trees with my icy touch, or whether I turn my cold breath upon them, they fall to the ground with fear and trembling. Are there any rumors of my deeds as great as that?"

The young man answered gravely, but with a laugh in his voice, "I never saw any leaves falling to the ground, for when I appear, they are all fair and green and trembling with gladness of my coming."

So the two talked all night long. As morning came near, the old man appeared weary, but the youth grew merrier. The sunlight brightened, and the youth turned to the open door. The trees were full of birds, and when they saw him, they sang, "O beautiful spring! glad are we to look again upon your face!"
"My own dear birds!" cried Spring. He turned to say good-by, but the old man was gone, and where he had stood were only snowflakes. But were they snowflakes? He looked again. They were little white snowdrops, the first flowers of spring. the only flowers that can remember the winter.The Book of Nature Myths.

## Summer Threads.

A little spider had lived all the summer in the neadow, and had busied herself catching many of those naughty midges that are so fond of biting children's hands and faces. In the winter the meadow is flooded by the river. and any little creature that cannot live in the water is drowned.

The spider has, at the end of the summer, just the same longing to travel that some birds lhave, but she could never get very far on her little legs, for the very first ditch would stop her. She knows a much better way to get along, however. She watches wind and weather like an experienced seaman: "To-day is beautiful sunshine," says she. " and a favourable wind, not too mild and not too blustry; this is a day to start upon a voyage!"

So she climbs quickly to the top of an alder-bush, and perches on the tip of a branch. There sh? stands upon her head, and stretches out her body. with its spinning apparatus upwards. She spins a long thread, and lets it blow far, far out in the breeze, till the wind lifts it and tugs at it, and the spider can hold no longer, lets go of the branch, an ${ }^{1}$ sails away at the end of her thread, like a ballooni-t in a balloon.

She sails away in her air-ship, here and there, according to her fancy, the thread rising high up over the ditches in the meadow, over the river, over bushes and trees, over the houses of the town, and over the church steeple. When the children see the spider's little air-ship they cry:"Look at the long summer thread!',

After a time the spider thinks she has travelled far enough, and wants to stop, but how is she to lower her ship to the ground? Small as she is, she knows a way out of the difficulty. She seizes the floating white thread with her nimble legs, and rolls it up into a ball. The more slie pulls it in, the less the breeze can carry it, till she gradually sinks to the ground.

Here the spider seeks a corner where she can safely take up her winter quarters. If she finds no likely spot, she spins herself next day another little air-ship, and travels further on. It is true that she can neither steer nor guide her vessel, for it is driven along with the wind, but she leaves it in God's hands, who has a fatherly care for even the smallest spider. But she must think for herself, also, and take heed which way the wind is blowing.

## Where Montgomery Fell.

All good Americans, when they visit Quebec for the first time, go to the spot where the ill-fated Montgomery fell in battle, in his rash attempt to take Quebec after his capture of Montreal in 1775. High up on the precipitous rocks above the lower city they find the inscription, "Here fell Montgomery, Dec. 31, 1775." As the Spectator stood there musing on the things that might have been, a carriage drove up containing three ladies. The driver announced, "Here was where Montgomery fell." The ladies craned their necks. "Where did he fall from?" "From up there, madam! He fell from the place where you see the sign, down to the road here, and the fall ended his life." The Spectator was highly amused at this interpretation of the word "fall." Following old Champlain Street, he came to the shore of the St. Lawrence and entered into conversation with an old Irish woman. Ie related to her what he had just heard: but, instead of sharing his amusement, she said seriously, "Yes, I've heard my old father tell about it; he said Gineral Montgomery was on horselack when he fell, and the fall killed both horse and rider!"Spectator, in N. Y. Outlook.

## Rhymes for Little Folks.

## Over the Meadow.

Over in the meadow, In the sand, in the sun,
Lived an old mother-toad And her little toadie one.
"Wink!" said the mother; "I wisk," said the one;
So she winked and she blinked, In the sand, in the sun.
Over in the meadow, Where the stream runs blue, Lived an old mother-fish. And her little fishes two.
"Swim!" said the mother; "We swim," said the two; So they swam and they leaped Where the stream runs blue.

Over in the meadow, In a hole in a tree,
Lived a mother-blueliord, And her little birdies three.
"Sing!" said the mother; "We sing," saidl the three:
So they sang, and were glad, In the hole in the tree.
Over in the meadow, In the reeds on the shore,
Lived a mother-muskrat, And her little ratties fonr.
"Dive!" said the mother; "We dive," said the four;
So they dived and they burrowed In the reeds on the shore.
Over in the meadow, In a snug beehive,
Lived a mother-honey-bee And her little honeys five.
"Buzz!" said the mother; " We buzz," said the five;
So they buzzed and they hummed, In the snug beehive.
Over in the meadow, In a nest built of sticks,
Lived a black mother-crow, And her little crows six.
"Caw!" said the mother; " We caw," said the six:
So they cawed and they called In their nest built of sticks.
Over in the meadow, Where the grass is so even,
Lived a gay mother-cricket And her little crickets seven.
"Chirp!" said the moher: " We chirp," sail the seven;
So they chirped theery motes In the grass soft ant cron.

Over in the meadow, By the old mossy gate, Lived a brown mother-lizard And her little lizards eight.
"Baskl" said the mother; "We bask," said the eight;
So they basked in the sun, By the old mossy gate.
Over in the meadow, Where the clear pools shine,
Lived a green mother-frog, And her little froggies nine.
"Croak!" said the mother; "We croak," said the nine;
So they croaked and they splashed, Where the clear pools shine.
Over in the meadow, In a sly little den,
Lived a gray mother-spider, And her little spiders ten.
"Spin!" said the mother;
"We spin," said the ten;
So they spun lace webs,
In their sly little den.
Over in the meadow, In the soft summer even,
Lived a mother-fire-fly,
And her little flies eleven.
"Shine!" said the mother; "We shine," said the eleven;
So they shone like stars, In the soft summer even.
Uver in the meadow, Where the wise men dig and delve,
Lived a wise mother-ant,
And her little antics twelve.
"Toil!" said the mother;
"We toil," said the twelve;
So they toiled and were wise, Where the big men dig and delve. -Olize A. Wadsworth.

## Greek Children's Song.

The swallow has come again
Across the wide, white sea;
She sits and sings through the falling rain, "O Narch, my beloved March!
And thou, sad February,
Though still you may eover with snow the plain, You yot smell sweet of the spring!'
-Sclected.

## The Caterpillar.

I creep upon the ground, and the children say,
"You ugly old thing!" and puslı me away.
I lie in my bed, and the children say,
"The fellow is dead; we'll throw him away."
At last I awake, and the children try
To make me stay, as I rise and fly.

## Grown-Ups.

There are no real fairies, grown-ups say so, Except in stories, which is so absurd-
If only they could know the secrets $I$ know, And hear the things I've heard!
I know what the thrush near the nursery window sings In the lilac bush below,
The fairies tell me heaps and heaps of things That grown-ups never know.
I know why the shadows grow so long and glide Across the lawn, beneath the poplars tall:
lt's because they want to look at the world outside, They're climbing the ivied wall.
1 know what the butterfly with painted wings . Says to the proud red rose.
The fairies tell me heaps and heaps of things A grown-up never knows.
1 know why the clouds, with which the sky is whitened, Hurry along so very, very fast:
They want to see the sunset, and are frightened That each may be the last.
I know why the river never, never sleeps, Why the wind comes and goes.
The fairies tell me secrets, heaps and hears, A grown-up never knows.
-Pàl Mall Magazine.

## March.

The stormy March is come at last,
With wind, and cloud, and changing skies.
I hear the rushing of the blast,
That through the snowy valley flies.
Ah, passing few are they who speak, Wild stormy month! in praise of thee;
Yet, though thy winds are loud and bleak, Thou ant a welcome month to me.
For thon, to northern lands, again The glad and glorious sun dost bring, And thou has joined the gentle train And wear'st the gentle name of Spring.
And, in thry reign of blast and storm, Smiles many a long bright sumny day, When the changed winds are soft and warm, And heaven puts on the blue of May.
Then sing aloud the gushing rills And the full springs, from frost set free,
That, brightly leaping down the hills,
Are just set out to meet the sea.
The year's departing beauty hides Of wintry storms the sullen threat;
But in thy sternest frown abides A look of kindly promise yet.
Thou bring'st the hope of those calm skies. And that soft time of sunny showers,
When the wide bloom, on earth that lies, Seems of a brighter world than ours.

## Your Gawky Boy.

That gawky boy of yours-ungainly, gaunt, shy, unprepossessing, as he is,-writes Henry A. Shute in the March Delineator. You nag him. You laugh at him and ridicule him. Did you ever realize how it hurts? You ought to realize it, for it is not long since you knew how it felt. You would have stood pain like a man, and so does your boy. You would have borne privation like a stoic, and so does your boy, and there would have been a grim sort of enjoyment in it, for the joy of resistance is fully awake at fourteen.

But you could not bear ridicule, and he cannot, and yet there is scarcely a day when you do not cause him sharp discomfort.
The boy's mother never does this. She loves every awkward movement of her boy. She loves nis long legs, and she loves to hear his raucous voice. She smiles at it, too, and at him, and it is a smile of genuine amusement; but there is love in the smile, and love in her eyes, and he knows it, and adores her for it.
If he becomes depressed and despondent, he confides his troubles in his dog, which sits in front of him gazing at him with an almost human expression of sympatly, and puts his paw on his master's knec.

A bit unfortunate, isn't it, that your own boy is obliged to depend on his mother and his dog for sympathy and affection? He gets none from you. and but little from his brothers and sisters. It is true, isn't it?
My friend, if you paid as much personal attention to the proper devlopment of your boy as you do in raising the two-minute trotter, or the blue-ribbon Guernsey, or the Black Strain Jubilec of (Orpington, or in beating bogy, or in your game of whist, you would be astonished at the results.

## CURRENT EVENTS.

## Glass water pipes are used in Germany.

A locomotive engine which consumes all its own smoke and waste steam, allowing none to escape into the open air, is now in nse in Belgium.
Since they were first known to Europeans, the mines of Mexico have produced over four thousand million dollars worth of the precious metals.
A promising new fruit from Uruguay is deseribed as having the size of an apricot and the shape of an apple, a bright red and yellow color when ripe, a delicate perfume and an extremely agrecalbe taste.

There is a continuous ineresase in the number of immigrants coming to Canarla. The total mumber for the last seven months is nearly fifty per cent greater than for the same period ending with January of last year; and it is expected that the total number to arrive in 1907 will
be fifty per cent more than the number of arrivals in 1906. While exaggerated reports of the very severe winter through which we have passed may deter some, it is expected that the number coming from the British Islands will be greater than ever before.

The failure of last year's crops in the valley of the Volga has brought famine to whole provinces of the Russian Empire lying north of the Caspian Sea. The Russian government is doing what it can do to relieve the distress; but funds are exhausted, and it has been obliged to ask for help from abroad.

The new parliament has not brought peace to Persia. The revolutionary movement is said to be spreading; and there is much disorder, especially at Teheran, where the parliament is in session, the populace refusing to acknowledge the authonity of cither the parliament or the Shah.

The first elections to parliament under the new constitution of the Transvaal have taken place, and the colony is now under representative government.

The International Exposition at Jamestown, Virginia, where the first English settlement on this continent was established, will be opened with imposing ceremonies on the $25 \mathrm{th}^{2}$ of April, the three-hundredth annivensary of the landing.

A new ice breaking steamer, the Lady Grey, has been built in England for the Canadian Government, for service on the St. Lawrence River, to maintain an open channel to the sea during the winter months.

A battle in the air is no longer among the remote possibilities of the future. It is possible to-day. The British Government has for months past been making experiments looking to the formation of a fleet of airships, and men are being tramed to manage them. The plans are said to include the use of kites as observatory stations, dirigible balloons for transpont, and acroplanes for actual fighting.

Another war has begun in Central America. Nicaragua has declared war against Honduras, and one or more of the other little republies will probably be involved. disputed territory and border raids are the immediate cause; but the possibility of some one state absorbing the others and founding a powerful Central American nation is always borne in mind.

It has long been known that the leaves of some of our wild cherries, notably our black cherry, though penfectly harmless when fresh, are more or less poisonous when wilted. This is due to the development of prussic acid in the drooping leaves. An English botanist in India has discovered that the same thing occurs in other plants under rare conditions; and mysterious poisonings of farm stock may be traced to some ordinarily wholesome fodder plants becoming suddenly poisonons.

The Ontario government is providing for the teaching of agriculture in all the county high schools of the province.

A German scientific expedition has discovered in Central Asia a large collection of ancient manuseripts in different languages and dialects, ineluding one or more languages hitherto unknown to modern students. It is probable that some important ancient writings will be found among them.

## SCHOOL AND COLLEGE.

Inspector of Schools A. G. Macdonald has been elected by acclammation mayor of the town of Antigonish, N. S., an indication that his fellow townsmen know how to appreciate the worth of an intelligent and upright man.

The provincial normal school at Truro, and the other schools and churches of that town wene closed for two weeks in February owing to the discovery of two slight cases of small-pox. By this prompt measure and by great vigilance on the part of the authorities the disease has been kept down.
Supervisor McKay of the Halifax Schools, recommends strongly the appointment of a physician to examine all pupils. The School Boand will probably put the suggestion into effect.
The New Brunswick Normal School at Fredericton is crowded to its utmost capacity. There are over three hundred pupil teachers in attendance.
Sir William Macdonald has given twelve scholarships of the Kingston, N. B., Consolidated School. This means that the pupils who win them have their fees and maintenance provided for at the new St. Ann's College, near Montreal.

## RECENT BOOKS.

First Science Book-Physies and Chemistry. By Lothrop D. Higgins, Pl. B. Cloth. Pages 237. The Copp, Clark Company, Toronto.
This book contains an excellent presentation of the first principles of the sciences of physics and chemistry. The subject matter is concise and interesting, and illustrated where necessary by diagrams. What renders it of great value to the teacher is the fact that it contains explanations of the various forms of electrical energy and the devices which man employs to use it, such as the dynamo, the motor, telephone, telegraph and other present day appliances.
In history and geography Messrs. Blackic \& Son, London, have published the following: Moncrieff's /feroes of European History (is. 6d.), which presents the principal figures, in easy reading lessons, from the early conflicts of Greece to the great wars of the lirench Revolution; Readmys in Englisin Ilistory (2s.), including selections from criginal sonrces, illustrating the chief events and characters in English history, arranged chronologically; A Geography of Eturope and the British Isles (2s.), for junior forms. dealing chicfly with practical gengraphy in its industrial and historical aspects; the geography of The World (1s. 9d.), No. V11, of the New Century Geographical Realers, is an interesting bird's-eyc view of the chief races and features of the world. All of the above books are attractively printed, with illustrations and maps.

In literature, Blackie's Model Reader, Book VI (1s. 6d.), provides interesting and varied reading in selections possessing literary merit; Maria lidgeworthis Murad the Unlucky and Other Tales (3s.), with a hiographical introduction of the athoress; Sir Wialter Scott's The Talisman (1s. 6d.), with introduction and noter. In the Greater flays of Shakespeare we have King Rachurd 11, King Kionard III, The Tempest, Cormbunts (price dul. (each), ornvenient and low-priced calitions. withont motes. In

J3lackie's Story-Book Readers there are selections from Lytton's Last Days of Pompcii, Henty's The Two Prisoners, and Among the Busltrangers (price 4d. each), and the Story of Willy Black ( $21 / 2 \mathrm{~d}$.) ; and in Blackie's English School Texts, Charles Dickens' The Chimes (6d.). All of the above is printed and bound in attractive and convenient form for easy reading. Blackie \& Son, London.
Black's Literary Reader, Book II (Is.), is illustrated in colour, and in black and white. The reading entitled " Little Folks in Canada," is, as a whole, a pretty picture of children's summer and winter sports here. Black's Picture Lessons in English (6d.) are useful aids to children's compositions. Adam and Charles Black, London.
Natural Elocution (Is.) is an attempt to develop an elocution which is natural to the speaker; Scasonal Botany (8d.) helps the teacher in adapting the study of plants to the round of the seasons and in the preparation of experiments; The Care of the Baby (3d.) is written with the view of helping the daughter as well as the mother how to manage the baby; Simplc Lessons on Health and Habits ains at presenting in simple and clear language the main facts of domestic science; Blackie's New Concentric Arithmetics, Book 1V ( 61. ), is designed for children from seven to thirteen years of age, the Series, as the name indicates, applying the fundamental processes of addition, subtraction, multiplication and division in an ever widening circle to the various combinations in which they are nvolved; Lilemontary Mathomatics (Algebra and Geometry-2s.) has been prepared for the use of pupils legiming the study of mathematics, the ground covering algebra as far as quadratics, the first three books of Euclid's elements, the mensuration of plane figures and of the simpler solids; The Teaching of English Grammar and Elcmentary Latin (qd.) is a decidedly novel and original introduction to these somewhat abstruse subjects,-calling for the interest and power of observation of the pupils. The above-named books are published by Blackie \& Son, London.

In modern languages, Blackie \& Son, London, publish a Skeleton German Grammar (2s.), a guide which, if thoroughly mastered, will conduct the beginner to a successtul mastery of translation; French Readings in Science (3s. 6d.), a selection of passages from chemical, physical, astronomical, physiological and botanical treatises, compiled to assist students in their general reading, and to prepare them for the London University examination, which, since 1904, has made it compulsory on candidates 10 translate a portion of a French and German scientific work; Alexander Dumas' La Jeuncssc de Picrrot (is, 6d.), a bright story for the young from that popular novelist; Fontaine's Shorter Fablis (6d.), La Bruyère's Les Caractires (4t.), Bechstein's Mïrcher (6d.), and two plays for acting in schools (price 4 d each).

In sulbjects from the Ancient Classics, Messrs. Blackie \& Son, London, have published Damon, a Manual of Greek Iambic Composition (2s.), which teaches Greek Jambic-writing on a system which the author (a teacher) has found to be as valuable a mental training as the study of the higher mathematios: A First Greek Course (as. 6d.), a practical and concise introduction to the Greek language. the author maintaining that "Greek can be learnt with profit and enjomment by the average boy, so that in less


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than a year he can read the Apology of Socrates, -and all that is paid for that result is one lesson of three-quarters of an hour a day;" Greek Morality in Relation to Institutions (5s.), an essay by W. H. S. Jones, M. A., Cambridge, with very full notes and references in Greek. In Latin we have Cicero's De Senectute, with introduction, but no notes (6d.), and Latin Unseens in prose and verse (3d.) Blackie \& Son, London.

## RECENT MAGAZINES.

The March Atlantic Monthly fittingly observes the centenary of Longfellow by an eloquent poem upon the well-beloved poet by Thomas Bailey Aldrich, and a study of his genius and place in letters by Bliss Perry. Other contributions, with essays and literary papers, stories and puems, are suggestive of the quality and brilliancy of this favorite periodical.

The February number of The Canadian Magazine contains an interesting article by Prof. Goldwin Smith entitled The Stage of Former Days. Prof Smith gives an appreciation of players who have long since gone from the scenes, and he advocates the endowment of theatres as powerful organs of culture. The article is accompanied by ten reproductions of old engravings and is altogether a valuable contribution to current literature. The number contains also eleven other articles, nine of which are illustrated, and five short stories.

The March Delineator is full of seasonable hints of the fashions and styles of the month. The children's department is as usual of great interest to schools and families. Its articles about women and the home are especially appropriate and worthy of thoughtful reading.

An article on Greenwich Time by H. H. Turner, which The Living $A g c$ for February 2nd reprints from the Cornhill Magazine is a good example of what a popular scientific article onght to be. It is clear and intelligible without being condescending and it fully acquaints the reader with the importance and the methods of the observations taken at Greenwich. The story of Amelia and the Doctor, now running in The Living Age, becomes more charming with each instalment. The Cranford flavor is unmistakable, but it is a twentieth-century Cranford, and the characters have a warm living interest.

## OFFICIAL NOTICES.

## Province of Nova Scotia.

The County of Colchester has been made a separate Inspectorial division by the Council of Public Instruction, to be known as Divlsion No. 12, to go into effect on the first day of Marcb, this year.
C. Stanley Bruce, Priocipal of the Shelburne Couoty Academy. has been appointed Inspector of Schools for Division No. 3 (the countles of larmouth and Shelburne).
W. R. Camphell, M. A.. Primcipal of the County Academy at Truro, has been appointed Inspector of Schools for Division No. 32, (the County of Colchester).

Teachers and School Trustees are asked to take notice and govern themselves accordingly. The address of each inspector is italicised above.

Halifax. 1 st March, 1907.


EDucational Review $\mathfrak{S u p p l e m e n t}$, Epril 1907.


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# The Educational Review. 

Devoted to Advanced Methods of Education and General Culture.

| Published Monthly. | ST. JOHN, N. B., APRIL, 1907. |
| :--- | :--- |
| O. U. HAY Editor for Now Brunswick. |  |

THE KDUCATIONAL REVIRW.
Oifce, 31 Leinster Street. St. John, N. B.
Feintad ay Barner \& Co. St. Joba. N. B..

## CONTENTS:



[^26]The May number of the Review will be devoted chiefly to Empire Day.

The New: Brunswiek legislature has under consideration a bill to establish a pension fund for teachers and to increase their salaries.

Surt. Dr. J. R. Incil and Supt. Dr. A. H. MacKay sail from Halifax May 3 rd to attend the Educational Conference of the Empire which opens in London on May 24th.

Tins number presents much useful material to help our schools in the observance of Arbor Day. We hope teachers may avail themselves of it, and that Arbor and Bird Day may prove interesting and instructive to every school, even if some find it impossible to plant trees.

Tiie picture "Morning Call" in this number appeals to young people; the sleeping child and the intent expression of the alert terrier suggest a story.

The calendar of the Summer Sehool of Science, which meets at Riverside, N. B., July 2 to 19, has been issued. Copies may be obtained from the Secretary, J. D. Seaman, Charlottetown.

In the death of Dr. A. A. Stockton, M. P., New 1runswick loses one of her foremost sons-a Christian gentleman of engaging social qualitıes, a lawyer of eminience, and one possessed of a well-balaneed and cultivated mind.

A prominent leader of education of the Maritime Provinces recently said: "I consider the Educational Review for January one of the most attractive, readable and instructive educational journals I have ever read; and, altogether, I am able to recommend the Review as the best single periodical our teachers can find."

Whamam F. Maclean, editor of the Toronto World, and Dr. A. H. Mackay, Superintendent of Education for Nova Scotia, will represent the Dominion of Canada at the first ammal meeting of the Simplifud Spelling Board, to be held in the Wal-forf-Astoria hotel, New York City, on April 3 rd and 4 th.. Both Dr. MacKay and Mr. MacLean will read papers at the meeting.

Many letters are received by the Review every day, the greater number from Nova Scotia and New Brunswick, and some from the other provinces of Canada. Recently statements were sent out to those in arrears of subscription. Letters in reply, enclosing remittances, were promptly returned by a great many. The following letter, so courteous in tone, makes us thankful that the lot of the editor of the Review is cast in with pleasant and kindly teachers:

I am sorry not to have been ahle to remit more promptly, but the delay was unavoidalle and not by any means due to a laxity of interest in your valuable paper, the Review. 1 find it a very substantial aid in my sehool work. With sincere wishes for the continued success and prosperity of the Educational Review, Sincerely yours, F.

## Glimpses Into Schoolrooms-IV.

## By the Elitor.

I visited a schoolroom on Arbor Day some years ago. On the ledges of the windows were boxes of seedlings which had been planted some weeks before. Some of the plants were just appearing above the soil. On the teacher's table were a few seedlings which had been planted earlier and were more advanced than those in the window-boxes. There were some pots of house plants on the table in front of the teacher and others were scattered in available places throughout the room. There were pictures on the walls, among which were some of trees, views of scenery, birds, and other animals. The schoolroom had evidently been carefully cleaned some days before. Everything had the appearance of being swept and garnished. The teacher and scholars were dressed neatly, and the bright, eager looks of all showed that there was a wideawake feeling of expectation among them.
The yard outside had been put in order, and all the litter removed or burned. Several shallow holes had been dug along the walk leading to the school or near the fence which surrounded the small plot of land on which the schoolhouse stood. A half dozen trees, carefully tied together with roots covered with earth, lay in a shady corner of the yard, ready for planting.
The yard was small and the gromen well trodden by the feet of many children. But there were some trees that had been planted on previous arbor days. These had evidently been set out with care and were doing well. The bark had it healthy look and the swelling louds had the promise of foliage and shade in the hot days to come. Those to be planted on this arbor day were to replace some that had not done so well, and a few new places were to be tried. The ground hand been carefully chosen for the trees, which were placed so as not to interfere with the children's play.

All this I observed from the windows. "You see," said the teacher, "that we have to keep Arbor Day for the most part within doors, but the children look forward to it with pleasure. They are great helpers. They lave had these window boxes made at home and filled with rich carth, and friends have given them the seeds. All the rest las been done bey themselves. They tend them with a great deal of care, but I have to look ont that they do not water then (tw much. It wonld amme you to have seen them when the firs plants began to appear alove gromol. That one thing seemed to repay
then for all the tronble they had taken. There is quite a rivalry among the owners of the boxes, and they measure and keep a record of the growth of the plants every few days. We have three prizes for the three best boxes of plants, to be given on the closing day in June."

After the opening exercises a few visitors began to drop in to listen to the lessons, which were on: bird and plant life. A record of the birds seen up to this date had been kept, and the children showed a very correct knowledge of the different birds, the colour and markings of their plumage, and their notes. The chipping-sparrow and the chick-adee seemed to be great favorites with the children, but they took an interest in all the birds and their habits. Each child had some interesting story to tell about what he had seen the birds doing, or of imitations of their songs, or of the good that birds do in helping to keep the farms and orchards clear of insects. One child told of a chick-a-dee that had been about her home all winter, and which she had fed every day with crumbs. Kindness to all animals seemed to come natural to these children, and one could see that they looked on the birds especially as their companions and friends.

There were quotations recited from the poets about many of the birds, and little compositions were read, showing that bird-study was made a part of the regular exercises of the school in literature and story-writing.

Then followed lessons on plants. The teacher said that all the food of the world was made by plants out of the raw materials in the earth and from the gases in the air. This was done by the green coloring matter of the leaves in the presence of sunshinc. Then she drew from the scholars the names of the various kinds of food-meats, bread, vegetables, fruit-and showed how these were all the products of green p'ants working in sunshine. " Little boys and girls," said the teacher, " were like plants, for they work best in sunshine; and the plants rest in the night time, as people do."

The growth of the plants from the seed was then taken up. Some plants, started in bottles of water, others in moist blotting-paper, were shown where the roots and shoots had developed. The teacher took one out of the soil from the boxes on her table, and, after cleansing the roots, compared it with those grown in water. The growth had been similar, and the pupils inferred that moisture was necessary for growth especially at first. Then the teacher drew from the class that light and air were also necessary
for growing plants. Is she proceeded a few hints on plant structure were given which were readily grasped by the class. It was a model lesson, for the teacher was careful to take up but few points. and to draw out what her pupils had already learned from their observation and experience.

After recess a lesson was given on forests,-their beauty, usefulness, and the care that should be taken to preserve them, especially from the ravages of fire. The children were instructed not to set fires in the woods until they were old enongh to know how to manage them.

In the afternonn the literary entertaiment and the planting of trees took place. The trees were dedicated to prominent men and women of the country, with the hope that they would grow and beantify the school grounds in days to come.

## The Influential Teacher.

The influential teacher is something more than a teacher. Devotion and even consecration to the schoolroom, a reputation for marvelons " results," and the possession of diphomats and degrees, atl combined, do not make a teacher inthential.

Is it advisable that teachers wield an induence in the commmity of which they are a part? Yes. Teachers need the enlargement of the association with people of varied interests, and these, in turn. need their intelligence, different ideals, and a knowledge of things erlucational. Besides, the sehools are vastly better for the co-operation that results from these united interests.

It is a fuestion if teachers fill the position to which they are elected if they give all their time. strength ami ambitions to their sclumb work, regardless of the general interests about them. . Inything outside of begom their sehomitrom dutice may not have been mentioned in the bond, but the public expects something more from teachers-in indefinable something growing out of their position.

But shall we make the first social arlvances: Ought not patrons of the school to be first in the recognition of teachers? ('nquestional)s, yes, butwe must take the world as we find it. To withdraw into one's self because sueh recognition is now fortheoming, and soek solace in womuled pride, is a grievous mistake. ㅅo worthy, self-respecting, sympathetic teacher ever advanced half way toward her rightful place in the community, and held her own stearlily, withont pique or small resentments, that did not find the extended hand from those best worth knowing. Such atnomalies exist as parents
who say, practically, " 1 give you my children a large part of every day for yen to impress yourself upon them intellectually and morally, but 1 cannot meet you as a social equal; you may mould the character of my child, but 1 camot invite you to my home." This monstrous inconsistency should not crush the spirit of any teacher. Without scorn, without comment, let her move steadily forward, wiming, in time, the larger sonls that redeem every community.

Not only do teachers need the benefits of association outside their profession for their personal good, but they need to be well intrenched in the respect and groxl-will of the leading men and women of the locality where their lot is cast for the sake of the schools.

Wrongs need righting, progressive measures need upllolding, and teachers personally always need the stimulus of at strong, sustaining power ; for with all their conscientionsmess and fidelity, they are the most submissive working body in Christianized countries. Unaware of their strength, if organized for a high purpose, they go patiently on, singly or in groups, wasting power. Low murmurs of just complaint over existing evils are heard alomg the lines, but these accomplish little, save to carn for the murmurers the title of discontents. An organization of teachers on the right basis wond secure strength. promote influence, and build a tower of strength abont the schorels. Salaries would not be withated through legal (quibles, for miter forces would mean pondr-always recognized, respected and feared. bint so long as teachers prefer to hang separately, rather than hang together; to be worked for, rather than th work for themselves throngh effective organization, let mon rightems means he left mansed to satin the influence of the best and strongest forces alom them. Lee it be always remembered that commmities do mot go out to the schmols. School interests must be brought to the heart of the eommanity. This can only be done by influential teach-ers-teacluers worth listening to, worth sustaining. and wortls holding.-Primary Education.

I man mas hite himself from yon, or misrepresent himself to you in every other way, but he cannot in inis work. There be sure you have hint to the utmost. All that he likes, all that he sees, all that he can do, his affection, his perseverance, his impatience, his clumsiness, cleamess, everything is there. If the work be a colowel, you know it was made by a spider ; if a homey-comb, by a bee ; *** A house is buikd by a man; worthily, if he is worthe; and ignobly if he is ignoble.-Ruskin.

## Educational Reports.

The report of the Superintendent of Education for Nova Scotia, Dr. MacKay, is an encouraging statement of progress in that province. The total enrolment of pupils for the year ending December 3 I , 1906, was 100,332 ; the average attendance 58.9 per cent, 2.6 better than the previous year. Thes sections reporting no school were 187 , against 240 for 1904, and 165 for 1905 . There were 1,558 schools open in rural or ungraded schools with 48,933 pupils, a slight decrease from the previous year. The graded schools of villages, towns and cities increased from 1,000 to 1,020 , and the pupils from 50,296 to 51,499 . There were 273 schools with less than 20 pupils, having an average attendance of only 9 . There were 697 schools with from 20 to 39 pupils enrolled; 450 with an enrolment of 40 or more; while in 202 school sections there were 1,020 schools or graded departments with an average enrolment in each of about 55 . The number of schools increased during the year from 2,429 to 2,446 -seventeen more than ever before.
There was a slight decrease of normal trained teachers in comparison with the year 1905. During the year the male teachers decreased from 386 to 366 ; while the female teachers increased from 2,180 to 2,212 .
There was more or less of an increase in the salaries of all classes of teachers, except that of the third class male. This looks as if the rural school trustes are not, as a rule, anxious to employ this class of young men. Their average salary from the section fell from $\$ 150.24$ to $\$ 144.82$; while that of the third class lady teachers rose from $\$ 122.93$ to \$131.19.

The school trustees and ratepayers increased their expenditure on school buildings and repairs from $\$ 68,000$ in 1905 to $\$ 91,000$ in 1906, and for all school purposes the vote of local funds increased from over $\$ 576,000$ to over $\$ 655.000$. The total expenditure on education, provincial, municipal and sectional, this year passed the $\$ 1,000.000$ mark.

White the total enrolment of pupils of all grades has for several years been nearly stationary, the number in the high school grades has nearly doubled during the last fifteen years. During the year this increase still continues in excess of the increase of the total school popalation - the 7.286 of last year rising to 7.639 ; while those voluntarily coming up to the provincial cxamination increased from 3,864
to 4,148 and those " passing" for the grades applied for, increased from 2,034 to 2,196 .

During the year fifty-three schools were consolidated into fifty-two effective sections-a good showing.

The reports of Principal Soloan of the Normal School, of Supervisor McKay of Halifax, and of the different inspectors form instructive reading.

The report of Dr. Inch, Chief Superintendent of Schools for New Brunswick, shows decided progress in the increase of schools and regularity of attendance for the school year ending 3oth June, 1906 ; but there is a falling of the supply of competent teachers of the first and second class owing to unsatisfactory remuneration and other causes.

The total number of pupils enrolled during the year was 66,335 , representing a proportion of population at school of one in 5.67 for the first term and one in 5.45 for the second term. The percentage of average attendance for the first term was 65.07 and for the second 6r.86. The total number of districts (or sections) is 1,495 . About 40 per cent of all pupils enrolled in the public schools of the province belong to the graded schools, that is schools having two or more teachers each in charge of a separate department. Schools in charge of one teacher are classed as ungraded schools.
Of the 1,883 teachers employed during the year, 333 were beginners, 247 have been upwards of seven years in the scrvice, and 1,303 have taught for periods varying from one to seven years-a record which shows that teaching has not that permanenre which it should have.

Of teachers employed, only 16 per cent are men, less than 24 per cent hold licenses above Class II, about 50 per cent hold licenses of Class II, and about 26 per cent hold the lowest class of license. Since igoo the number of untrained teachers employed has increased from $2 I$ to 72 .
In the first term of 1905-6 there were 162 districts having $n o$ schools, while in the second term the number had increased to 213 districts.
The following are the average salaries for the province received by teachers of the several classes:

| Sehoors. | , |  |  |
| :---: | :---: | :---: | :---: |
| Superior School | 611.17 | ncrease | , |
| First Class (Malc) | 609 | Inc | 32.23 |
| Second Class (Male) | 319.84 | Incr | 3.75 |
| Third Class (Male) | 238.91 | Increase | 4.01 |
| First Class (Femalc) | 356.95 | Increase | 17.23 |
| Second Class (Female) | 255.85 | Increase | - |
| Third Class (Female) | 198.12 | Increas |  |

While the increase above noted is not large, it shows an upward tendency. It is gratifying to know that the legislature of the province is considering the advisability of increasing the salaries paid to teachers.

Dr. Inch's report is, on the whole, hopeful. An increase is shown in the number of pupils attending the high schools, the work of establishing consolidated schools is progressing as rapilly as can be expected, and interest in educational matters is increasing.

In the report of the I'rince Edward Island schools, Dr. Anderson, Chief Superintendent, notes that the highest percentage of attendance ever recorded. 62.69 , was made for the nine montlis ending September 30th, 1906. There were 537 teachers employed during that period and eighteen schools vacant. Of the teachers employed, 246 were males and 327 females. The pupils registered were fewer by 286 than those of the previous year. The highest salary paid to male teachers was $\$ 663$, to female $\$ 360$. The lowest salary, $\$ 260$, paid to third class male teachers, and \$i30 to third class female teachers. The total expenditure for education in the nine months was $\$ 126,708.93$, and the expencliture for each pupil registered $\$(0,87$. The government paid within a few cents of two-thiteds of this amount, and the increase in local amounts paicl is so small as to be insignificant. Maumal training, nature-study and domestic science are taught in one county only, Queens, and these branches to a limited number of pupils.

Dr. Anderson deals with the ratepayer in Prince Edward Island who has no children to educate, and whose chief duty at the school mecting is to oppose every motion for advancement. He thinks that all ratepayers who have children at the district school should have an additional vote, that is that they may have two votes on every question that is brought up) for decision at the school meeting, while all other ratepayers lave only one.

It is interesting to compare the above with figures for British Columbia. In that province for the year ending June 3o, soot, the total enrolment in all the schools was 28,522 . The number of loys was 14.524, and of girls $13.9 y$ g. The grand total days. attendance made by all the pupils enrolled was 3.892.444, an increase of 197.322 . The average actual daily attendance was 19.506 . an increase of ( 4.47. The percentage of regulat attendance was ris.30). The total cost for chlucation was $\$ 6,88.7+5.56$. of which the govermment paid $\$ 44,5+2.88$.

## As the Teacher so the School.

It is an old saying that as the teacher so the school. The best meaning for this is that the pupil's mind, in the act of learning, becomes like the teacher's mind; it takes on the tone and coloring of the teacher's thought. The teacher builds his own thought stricture into the mind of the pupil ; begets him with his own purity, strength and sweep of emotional life; breathes into him the breath of his own ethical nature. The teacher may resolve to train to accurate, thorough and methodical habits of thought ; but unless these are habits of his own mind his efforts will be mavailing. The stream cannot rise ligher than its source. If the teacher thinks loosely and slovenly he cannot hope to realize anything better in the pupil so far as the teaching goes. The narrow pedant and dogmatist can never secure scholarly habits and liberal culture. The teacher who has not a rich and full range of emotional life can expect nothing but a withered soul born of hits teaching. The man who has not strength and purity of character cannot strengthen and purify character. The teacher butilds his life into that of his pupil; and it is absolutely essential that his life be all that he expects the pupil to become. The quality of a teacher's life is a part of his professional equipment.-Arnold Tompkins.

## Word Game.

Whic teaching the first grade I found the following word game a very interesting and instructive one for the children. When they were able to recognize as many as sixty words, I cut little twoinch squares of cardboard and placed on each one of the words with which they were acquainted. I mixed with these some new words. When we were ready for the game. I gave each child an equal number of words and divided the school into equal sides. I then called for the words in this way: "I want the word that tells the name of an animal that catches mice." The child having the word "cat" raised his hand and was given credit for one. A pupil was appointed collector, and, as the words were used, he collected them. If any one failed to recognize his word when it was called, or gave in the wrong word, one was taken from his side. In this way they learned to recognize words rapidly ant also learn the meaning of many words.-Ruth O. Dyer, in Oregon Teachers' Wonthly.

There are two good men-me dead, the other mumarn.-Chinese prozerb.

## Nature Study in April.

By G. U. Hay.

April, with its showers and sunshine, is upon us once more. The woods, fields and gardens are awakening into life; the insects and hibernating animals are aroused from their winter sleep, and come forth hungry for food and the warm sunshine; the birds are returning from the south, choosing their mates, seeking quiet nesting-places and gathering material for nest-building; the farmer is clearing up rubbish, repairing fences and outbuildings, and preparing to plow and sow his fields; inside the house the windows are thrown wide open, spring cleaning begins, with the bustle of taking off double windows and outer doors-papering, whitewashing and renovating; among the children skates and snow-shoes and warm mittens are put away, and rope-skipping, playing ball, flying kites, hooprolling, playing marbies, are entered upon with fresh zest. The keen air and sports of winter were eagerly enjoyed while they lasted; now the fresh delights of spring move us. Do we ever stop to think how pleasant is this change of seasons, year after year, what a variety it brings, and how full of fresh enjoyment is each season as it comes?

The small number of birds in April give good opportunities to begin this study, and there are other reasons why birds should interest even very young children. They are active; they have colour; their songs pease; and the hundred little ways of birds as they flirt and flutter about the lawns or in the tree-tops are particularly attractive to children. Advantage may be taken of this to begin the season's nature-study with birds. How are they able to fly so quickly and to take such long journeys in the fall to the south and back again to the north in the spring? A picture of a bird, the weight of a tame canary that will perch on your finger, the exceeding lightness of a feather or a bone will leelp to answer the question. Notice from the picture, or the tame canary, how the bird's body is so made that it cuts through the air without much resistance -how it is able from its lightness and the breadth of its wings to poise itself in the air. Notice the swallows and other birds, how they are able to rise in the air by beating it with their wings, and to descend by closing their wings. Soon the children are able to distinguish birds by their colour, form or by their sweep as they go through the air. The witchery of their notes or the graceful waving flight of the thistle bird or American goldfinch when once heard and seen will easily make it known to children ever afterwards; and su the different traits
of other birds will open up a new source of observation and interest to the child mind. A last year's bird's nest will show the skill and patience with which birds plan and work. Why do they not use the same nests year after year as we do our houses? Here will be an opportunity to show how clean and tidy a bird is in its habits, and the reasons why it should not occupy the old nest.

At the same time the child will be learning about birds, he can easily be led to see how important it is to be clean and tidy in his person, and in his room at home ; the patience and skill of birds in building their nests, their seeming delight in doing things well teach children habits of cleanliness, patience, skill and industry.

While the field observations are keeping little eyes and ears on the alert, schoolroom work may be used with it. The terms used in describing birds must be accurate, and this habit of accuracy will be formed in the language and other work of the school.

Teach the duty of kindness to birds and all other animals, how useful the bird is in helping the farmer to get rid of many insects that would destroy his crops and orchards. Organize for older scholars an outdoor "Bird Club," whose members shall pledge themselves to protect birds, observe and report the useful work they do for farmers, make observations on the habits of the common birds around them.

The plants, as they wake out of their winter sleep, will be no less interesting to watch, although they do their work more quictly. It seems as if the drops of the April showers are arousing the little sleepers in their beds (the buds and underground tubers) by their quick "tap, tap" on the ground and on the branches of the bare trees. Watch the catkins of the willow, poplar and alder. Bring them into the schoolroom and put them into water. See the differences as they unfold. See how the buds on the different trees swell after a warm April shower and the sunshine which usually follows it. They are slow to open, but after a while they throw off their brown winter coats on the ground. They do not pack them away in trunks and closets as we do our winter wraps. The plants make new winter-coats for their buds during the summer. The birds build new nests every spring, and yet Mother Nature provides winter clothing and food and shelter for her children. How many are the calls made upon her; and how generously cloes the God of Nature care for all!

## April Days.

Eleanor Robinson.
No satisfactory derivation has been found for the name April, though different ones have been suggested; old writers derive it from omnia apcrit, "it opens everything," while some think that there is a connection with the name of the goddess Aphrodite (Venus), to whom the month was sacred among the Romans.

Itl different countries of Ettrope and in America, the practice prevails of playing pranks on unsuspecting people upon the first day of the month, called April Fool's Day. The common form of fooling is to send a person on some bootless errand. In Scotland the victim is called the "gowk," and the person sends him on to another, with the instruction, "Hunt the gowk another mi.e." In France the person on whom the trick is played is called un poisson d"Avril, or "April-fish." The custom seems to be of longer standing in France than in England. A story is told of a certain duke of Lorraine, who, together with his wife, was escaping from the town of Nantes, botlo disguised as peasants. A woman recognized them and ran to tell the guard, but it happened to be the first of April, and the soldiers refused to be fooled, so the fugitives had time to get away before the alarm was really taken. English literature of the eighteenth century has many references to April Fool's Day, but little or nothing concerning it is found in earlier writers, and the origin of the custom has never been determined. The Hindoos have a festival on the 31 st of March which is celebrated in the same way.

St. George, the patron saint of England, was martyred at Nicomedia on the 23 rd of April, 303. So little historical fact is known about him, and so many legends have gathered round his name, that in the fiftlh century he was declared to be one of those " whose names are just'y reverenced among men, but whose actions are known only to God." St. George was honoured in England as carly as Anglo-Saxon times; but before the thirteenth century Edward the Confessor was the patron saint. Richard I, during the third crusade, placed himself and his army under the special protection of St. George, and from that time the saint was very popular among the English. In 1222 his feast wat ordered to be kept as a holiday throughout England. In the reign of Edward III, the Order of the Carter was instituted and dedicated to St. George and St. Edward the Confessor, and since then St. George
has been England's patron saint. The festival of the order was kept on April 23rd, at Windsor, with great splendor until the reign of Elizabeth, when it was discontinued. But as late as 1614 it was fashionable for gentlemen to wear blue coats on St. George's Day.
(For a fuller account and the story of St. George and the Dragon, see Educational Review for April, 1902).

The 25th of April is observed as the festival of St. Mark, the evangelist. It was he who fotunded the church in Alexandria, and he was martyred there on a heathen feast day.

A curions superstition is attached to St. Mark's Eve in different parts of England, more especially in the north. It is, or was, popularly believed, that whoever watched in the church porch from elevein at night until one in the morning would sce the apparitions of all who were to be buried in the church yard during the coming year.

> "'Tis now," replied the village belle, "St. Mark's mysterious cve, And all that old traditions tell, I tremblingly believe, How, when the midnight signal tolls Along the church yard green. A mournful train of sentenced souls In winding sheets are seen. The ghosts of all whom death shall doom Within the coming year, In pale procession walk the gloom Amid the silence drear."

Thomas Hood has an amusing story founded on this superstition. A farmer and his wife, who were both very greedy and fond of good living, quarreled over their supper on one St. Mark's Eve, and each wished the other were dead. After supper, the farmer, who firmly believed in the truth of the superstition, went secretly to the church to watch and see if his wish was to be granted. His wife also remembered how she might get a glimpse into the future, and she, too, set out on the same errand, but by a different path. The night was dark and stormy, but the moon shining ont studdenly showed the man and wife to each other for a moment. They both ran away frightened, thinking that they hatd seen a ghost. From that time the farmer, thinking that his wife had but a year to live, treated her with great kindness, and even insisted on her eating all the choicest morsels at the table; white she, on her part, believing that she wouk be a widow within a twelvemonth, cottld not do enough
to please her poor husband. Quarrels became rare, and they were happier than they had been in their whole married life before. At last, as the year drew to an end, and both continued hale and hearty, the wife thought it her duty to warn her husband that his death was near at hand. Then the truth came out; but kindness and forbearance had now become habitual, and once safely over the dangerous anniversary of St. Mark's Eve they lived happily, and were known as the most united couple in the country.

## The Modern Novel.

In a recent lecture, Professor William Lyon Phelps, of Yale University, discussed the formost novelists of the present day, and gave a short history of the novel in different countries which highly entertained the large audience.

Among the remarkable statements which the versatile professor made was the one wherein he said that the increase in novel reading is due to the common schools of this country, which have created a great reading public whose wants must be gratified. The result is that the novel of to-day is turned out hastily, and we lose the careful work which was the mark of the novelist of the past.

Russia to-day leads the world in novel writers, followed by France and England. The Germans have had a surprising lack of success due to the fact that they have no sense of proportion. All the German writers have turned to the drama.

America has had one really great novelist, Nathaniel Hawthorne. "The Scaret Letter" is the greatest single novel ever written in this comntry. There is no great novelist here to-day, although Mark Twain's "Huck Finn" and "Tom Sawyer" will remain as epics of American life. Henry James has written an excellent ghost story, "The Tarn of the Screw."
In "The Virginian " Owen Wister nearly wrote the great American novel, but its fault lies in the fact that it is a string of episodes instead of a story.

Slay Sinclair's "Divine Fire " had undonbtedly some fire in it, but the flame is occasionaly hidden by smuke.

Thomas Hardy is the lest of present-day English novelists. From the publication of the "Greenwoon! Tree" down to his latest nowel his output is the best of any living writer of Fnglish fiction.
(One of the strongest writers in Fingland to-day is (ieorge Alsore. He can hardly le callent an Engibhnan, however, for he is in Irishman with a fieneh education. His wurik limithes with ideas,
although he offends many by his extreme frankness. His "Esther Waters" is one of the finest realistic novels in Engish.
"Bob, Son of Battle," written by a man who has lain on his back for years with an affliction of the spine, is the best story written in English since 1898.
In speaking of Kipling, he remarked that his recent works has been spoiled because he has been in terror of saying something commonplace, and so he has been constantly striving for effect.-Arthur Marin.

## My Teacher.

My teacher isn't old, nor she
Ain't ugly, like my father's used to be; She's got a great big pompadour With crinkly waves. No small hair store Can make that kind-a rainy day Has never taken the fluff away. Her eyes are bright and smiley too, Most gea'rally-tho they see right through Any meanness you're tryin' to do. And how you feel-for they don't look mad But sort of frozen up and sad. When she laughs, her teeth's so white! (I use my toothbrush every night And morning too, for she says she Likes us all to be clean's kin be, And washings, outside and in, prevent The sickness that makes us abersent.) She's different from some, she doesn't wear 'The same old dress 's if she didn't care. My auntie says 't uster be the rule That any old thing's good enuf for school When she was young. But she hasn't seen My teacher-she's like a queen In her clean white waist and short green skirt, That neyer hangs down behind in the dirt, Nor hunches up in the front like some, But always look's if company'd come Nlost any time.
It's not only cioes
But the lot of interestin' things she knows That makes her not like them father had When he went to school a little lad. All kinds of birds and where they buildWith what kind of stones the brook is filledThe queer ways the Spaniards have to farmAnd how the different bones of our arm Are joined together. "Books are full Of things like these," she says. "Dull And dead and dry, I always thought, But now I go to the lib'ry an awful lot. Pa told ma, some criticise and say They don't teach 'rithmetic the same old way. But he says be never did see Clear through picentage quick as me. And he guesses the ones who make the fuss Haven't any children, happy like us, And if taxes are big, he d vote today 'lo raise the new kind of teachers' pay.
-Boston Transcript.

## Rubens.

Miss A. Maclean.
: Peter Paul Rubens, born at Siegen in 1577, is the greatest of Flemish painters and one of the master artists of the world. This remarkable scholar, artist and diplomatist, was the son of John Rubens, one of the principal magistrates of Antwerp, and of Mary Pypeling, of a distinguished family of the same city.

Rubens cariy began the study of art with Tobias Verhaegt, a landscape painter. Then he studied with Adam Van Noort, and finished, as far as teachers were concerned, with Otho Voenius. Van Noort lacked all that Voenius had acquired, ant! possessed what Voenius lacked. He was liasty, violent, savage, impulsive, and just as nature made him, both in disposition and works, but he possessed real originality. He was a fleming in race and temperament, loud voiced, full of rough sincerity, daring, because he knew what he coult do; and he never worried over what he probably was aneonscious of lacking-culture. He was the last offshot of the stem that had produced the Vitn Eycks, Menling, Breughel, and others. He loved whatever was vigorous, sanguine, brawny, savage. He delighted in powerful accents, and the colour glowed and rippled on the canvas following the strong, sure, restraint-scorning strokes of his brush.

Voenius was cultured, erudite, of lofty birth, distinguished appearance and moble figure, a student of Venice, Rome, l'arma, florence-the man and the artist were equaliy traned and polished-but he lacked the decision anel origimality of V'an Noort. Someone says: " He might be called an execllent master who taught admirably lessons too admirable and powerful for himself." Rubens seems to have imbibed all that his teachers had to give, and to have had matnrally more and greater grifts than they possessed. But without Van Noort would Rubens have been abe to so toucli the hearts of the people? Without Voenius would he have appeater so to culture and rank?

In IGOO he went to V'enice and studied the works of Titian and 「atul Veromese. Ne spent several years in the service of the Duke of Mantua. He was an excellent latin scholar, and was also proficient in French, Italian, English, German and Dutch, and these acquirements procured for him dipomatic empooment. He was sent on an embassy to the court of Spain, where the highest honours were shown him. Then he returned to Mantua, preparatory to periods of sturly in Rome
and Venice. Then he went to settle in Genoa, and entered into the society of princes, and enjoyed all that wealth and greatness could confer. Hearing of his mother's illness in 1600 , he returned to Antwerp, bearing with him all that foreign study and association could give him, and was at once recognized as the first master of his age. Talent, glory and fortune were his. He was appointed court painter to Archduke Albert, then governor of the Netherlands. In 1620 he visited Paris at the invitation of Marie de Medici. In 1628 he was sent on a mission to Philip of Spain, and in I629 to Charles I, of England, and bere he was knighted and given an honourary degree by the University of Cambridge. But wherever he went he continued to paint, and is reported to have said of himself: - The painter, Rubens, amuses himself with being ambassador." The enormons number of works he left testify to his faithfulness to art-between 2,000 and 3,000. Whenever he was situated so he could have pupils, he always had many of them, and a great deal of the filling in of his pietnres was done by them.

In IGog Rubens married Isalsella Brant, who died in IG26. In iG30 he married the beatiful, sixteen-year-old Ilelen Fourment, niece of Isabelia Brant. Both women so often sat to him as models that the world is familiar with their appearance.

When Rubens returned to Antwerp in I rog, the knowledge of Italian art which he had acquired, and his strong bias to native Flemish art, were at war within him. Native Flemish art hand been clear, minute, precise, acnte, as though the former working in copper, gold, melting and colouring of glass. enancling and engraving in which the fathers had been employed, had been transmitted as an influence on the paintings of their children. Wint the rich and homogeneous Flemish colouring had, after the days of the early. Flemish artists, begun to feel the influence of the Italian Renaissance. The colouring became broken, the tone divided, and it lost force and brilliancy as it lost unity. Italian fashion in art did not fit well on Flemish painting, and by the time of Rubens, Fiemish art hat become undecided, and practically unrecognizab.e. Then Rubens appeared, and his art, thongl, suffused with the culthite of many schools, became the most lilemish of the Flemings.

Though Rubens had painter many works previonsly, the first public acts of his life as the head of a school were the two paintings in the Cathedral of Notre Dame in Antwerp, the Descent from the

Cross and the Elevation of the Cross. These are much admired, and may be considered his master works. Nothing could be more unlike than these two works, formed at an interval of two years. The former is the result of all his Italian education; the latter the outcome of his daring, impulsive spirit, full of originality, fiery fervor, rapid manner and dash. Great renown is attached to the Descent from the Cross; the Elevation of the Cross has touched more keenly the thorough friends of Rubens. Looking at the Descent from the Cross, and remembering works of Rubens portraying scenes of blood massacre, torturing executions, fiery pincers, shrieking of anguish, one realizes what restraint he must have put upon himself when he painted this picture. Everything is restrained; no cries of grief, no gesticulations of sorrow, no violent emotion is visible in the Virgin, the figure of Christ, slender, delicate-the most elegant figure Rubens ever imagined of Divinity-glides down along the winding sheet to the extended arms of the women who receive it. The Magdalen in this picture is the best example of womanly beauty ever painted by Rubens. The colouring of this picture is an absolute black, a green almost black, a dull red, and a white. With what simple colours he painted, and yet who can use them as he did? The Descent from the Cross is pronounced singularly original and powerful.

In the Elevation of the Cross, tenderness, pity, friends are represented by a far-away group of lamenting dcspair. Near are cries, curses, savage crucifiers, blasphemy, insult and brutality. The figure on the cross is in the grip of human hate and fury, but the escaping spirit pities and forgives. This picture reaches the sublime; and whatever advances Rubens later made in technique, nothing of his eclipses this work in picturesque conception and inexpressible individuality.

The works of Rubens are so numerous that it is impossiblc here to give any adequate idea of even the more important. In the Metropolitan Museum in New York are six pictures by Rubens. Most people consider them very admirable. A portrait of Isabella Brant makes me marvel at the nature of the man who could exlibit to the gaze of succeeding centuries, in such a pose, his wife. Sympathy for Helen Fourment makes me pass without looking at the picture of "Susannah and the Elders." The "Return of the Holy Family from Erypt" is fine in colouring and technique, but it does not appeal to me. It is not my idea of the subject, and then the Dutch school is my favor:ta school, and one

Rembrandt represents to me more moral sentiment, depth and dream than all the works of Rubens.
The life of Rubens was a triumphal procession, and he fortunately vanished from our earth before his powers began to wane. He died in 1640, and was buried at Antwerp, in his private chapel in the church of St. Jacques, which he decorated with his magnificent painting of St. George.

## A Study in Forestry.

The following makes a very interesting form of entertainment for a small party. The prize, for the largest number of correct answers may be a pretty forest scene or a paper weight of some handsome polished wood; the "booby" prize may be a small block of wood with a tiny toy axe or hatchet.
r. Which tree a kissing game could play?
2. And which its father's name could say?

Which shall we wear to keep us warm?
And which do sluips prefer in storm?
Which shows what love-lorn maidens do?
And in your hand which carry you?
7. And which is't that the fruitmen fear, That makes a call each seventeenth year?
8. And from their pipes men shake which tree?
9. Which is't had boys dislike to see?
10. Which is a girl both young and sweet?
ir. Which like a man bright, dapper, neat?
12. And on which do the children play With pail and shovel all the day?
13. And to which tree shall we now turn For goods to wear and stuff to burn?
14. And now divide you one tree moreYou've part of a dress and part of a door.
15. Which tree is never seen alone?
16. And which one is a bright, warm tone?
17. And which in church doth office hold?
18. Which is a town in Ireland old?
19. For this one do not look so farWhich tells what charming people are?
20. And which one will allay the pain, If promptly rubbed on bruise or sprain?
21. The carpenter doth use which tree To make his wall straight as can be?
22. And to which tree do urchins call To show you shouldn't have looked at all
23. Which tree on calendars find you?
24. Which is a joke, told times not few?
25. And which call we an Ohio man?
26. And which for soup we sometimes plan?
27. Which tells "where at," on land or sea, An Englishman likes best to be ?
28. And on our feet we'll wear which tree?
29. And which our hero's crown shall be?
30. Another tree to find just try,

For fish and fuel for a "fry."
-Charlotte E. Stimson, in April Delincator.
The answers to these questions are given on page 268.

## The Law of Unity Applied to Education.

Mrs. C. M. Condon.

The profound recognition of the law of unity lies at the very foundation of Froebel's educational system, and it is his keen apprehension of its scope and implications, together with his skilful adaptations of its requirements, that make him so sure and safe a guide in the art of human culture. This habit of shrewd observation ans power of introspection, joined to a very sensitive nature, made Frobel, even in childhood, painfully aware of the dissonances of life. An ever-widening observation of nature, animate and inanimate, brought relief to his unrest in the full and intelligent acceptance of this law of unity or inner-connection. Some quotations will indicate a few steps in the process. It was on leaving the University of Jena, in his twentyfirst year, that he says: " My stay at Jena had taught me much, but by no means so much as it ought to have taught me, but I had won for myself a standpoint both subjective and objective. I could already perceive unity in diversity; the correlation of forces; the inter-connection of all living things; life in matter; and the principles of physics and biology." Of himself at twenty-five years old, he says: " The most preguant thought that arose in me at this period was, all is unity, all rests in unity, all springs from unity, strives for, and leads up to unity, and returns to unity at last. This striving in unity, and after unity, is the canse of the several aspects of human life." Now, later on, breaks upon his mind the grand thought of the solidarity of the human race: " Mankind, as a whole, as one great unity, has now become my quickening thought." When he was at Berlin, the lectures of Dr. Weiss in natural history strengthened his insight.

Struck with the calm serenity of nature in one of her loveliest spots, he feels that, "there must exist somewhere some beautifulty simple and certain way of freeing luman life from contradictions, some means of bringing man to peace with himse.f internally." To know a truth, with Froelel, was to reduce it to practice, while his genial, minselfish. nature made him desire to share with the whole world the blessing which be laad won with such conflict.

He now felt that his vocation was to help his fellow-creatures to realize this ideal which stond so clear and so beautiful before his own mind, and he saw clearly that a great reform must be made in the methods of cducation. So, giving up, deliberately, all thought of personal ease and profit, he relinquish1-
ed the profession for which he had prepared himself, and became a teacher in the model school at Frank-fort-on-the-Main. When he stood up before his class of boys, to use his own words, "the bird was on the wing, the fish in its native element." His original method in teaching geograply and arithmetic was recognized as unique and efficient. As a child, he had felt that the method of instruction in the schools he attended was not what it should be; his experience at the different universities had confirmed this opinion in many ways, and showed him that, with notable exceptions, the instruction was unfruitful, beeause not based on sound philosophical prineiples. The correlation of studies was ignored, so that the teaching was serappy and disconnected, and the "circle of human knowledge" was a mere theoretical phrase, instead of being an embodied fact. The university faculty complained that students came unprepared to take up the work of the eurriculum ; the high sehool teachers declared that too often they had to do the work of preceding grades. At first Frebel thought that if teachers were better prepared for their work, the schools wou'd produce better results. Eager as ever for self-culture, and desiring to thoroughly fit hinself for teaching, he went, after securing an honourable discharge, to study Pestalozzi's methods, which were then attracting the attention of the world.

Meanwhile his continued study of the practical applieation of the law of minity to education proved to his mind very clearly that education, to be successful, must be conducted on lines indieated by this law of intercomection, one implication of which is development. He saw that the subjects and the process of imparting them at any given time must be exactly suited to the stage of development of the scholar. Frœbel, in common with Herbart, recognized culture-epochs in the scholar corresponding to those of the human race, of which the individual is a unit. And he saw that they, cultureepochs. must be reckoned with both in training and instruction, and that to present the wrong subject at the wrong time, or fail to present the right subject at the right time. was an irretrievable mistake.

Continuity was another principle implied in this law of unity ; therefore, there must be no gaps, nor breaks, in education, but every point of it must connect itself, intimately with every preceding and succeeding stage, in the same heautiful sequence. of which mature is so full of illustrations. Going back. grade by grade, from the university, at first Froblel thouglit that, if teachers were better pre-
pared, the results of education would correspondingly improve. In the different institutions which he established, his experience soon showed him that even with the best teachers there was still something wanting to secure success; and he soon found that the cause of failure lay in the neglect of developing the intel'ect and soul of the child from the earliest period. It has been well said, that he pursued his inquiries all along the line of education from the miversity till he stood by the cradle of the infant. There he felt that the true beginnings of human culture were waiting to be unfolded, by helping the child to the normal use and growth of faculties and powers that lay latent within him ready to respond to wise impulse and fostering care.

Just as the plant must be supplied with suitable conditions to ensure the beautiful growth intended by the Creator, so must the child find, before the life of the school, a fu:l rich culture in the kindergarten and the home; and education must, based on a sound philosophy, even in its very beginnings, form a part of one organic whole, and be a perfect expression, so far as human frailty permit, of this law of unity.

## A Bird Tragedy.

One evening recently, while lying in my hammock, I noticed a wounded robin fluttering and hopping across the lawn. It was making its way toward a maple-tree in which I knew a pair of robins had their nest.
Having reached the foot of the tree, it made several futile efforts to fly up into the branches, but only succeecled in fluttering around in a circle near the ground, as onc wing was broken. It seemed to be a hopeless struggle, and I wondered how it would end.
I had recently been reading " Wake Robin," and these words of John Burronghs' came to my mind: "One may go blackberrying, and make some discovery. Secrets lurk on all sides. There is news in every bush. What no man ever saw may the next instant be revealed to you."

I do not suppose that the scene which followed is the first instance of the kind that has been noticed; but it was new to my eyes, and I watched it with eager interest.
The repeated efforts of the bird to reach its nest attracted the attention of its mate. She soon flew flown beside him, emitting piterns little notes. Wher hopping anxiously around him for a few
moments, she flew away; and the wounded robin settled quietly down in the grass.

In three or four minutes the mate returned with a large worm in its bill, which it deposited by the side of the sufferer. The worm was eagerly devoured by the wounded bird, who then again rested in the grass, his mate meanwhile having returned to her nest.

Presently the robin, having apparently regained some strength, began to chirp, and was answered from the branches above. His mate again flew down to his side; and now the robin made a desperate attempt to fly or spring up, his mate with outstretched wings got under him, and by their united efforts they gained the branches and their nest.

I heard them chirping for quite a while, evidently trying to find a comfortable position for the wounded bird. It was now dark. My heart throbbed in sympathy for the helpless little creatures. I resolved to be up early, and place food and water near them.

Alas! when I went out in the morning, the robin was dead. I examined his injuries, and found his side had been crushed in, evidently by a stone thrown by a thoughtless boy.
"Oh, boys, boys," I cried in my indignation, " how can you be so crucl or thoughtless? Thoughtlessness that brings pain and death to these little creatures is a crime. Think not that He who grieves at the sparrow's fall will hold you guiltless when you ruthlessly take the life which you can never restore!"

I buried the robin at the foot of the maple. The only requiem was the short, sharp chirps of the bereaved mate, who watched me for a while from a safe distance, then flew away, never to return.A. R. McAlpinc.

## A Study in Forestry.

The correct answers to the questions on page 266 are as follows: 1. Tulip: 2. Pawpaw: 3. Fir; 4. Bay: 5. Pine; 6. Patm; 7. Locust; 8. Ash: 9. Birch; 10. Peach; II. Spruce ; I2. Beech; I3. Cottonwood; 14. Hemlock; 15. Pear: 16. Cherry; 1\%. Elder; 18. Cork; 19. Poplar: 20. Witch-hazel ; 21. Plum; 22. Rubber; 23. Date; 24. Chestnut; 25. Buckeye; 26. Crab; 27. The Elnt 28. Sandal; 29. Laurel ; 30. Basswood.

Weary mother.-" Oh, Jack, if you only knew how tired I get of saying 'Don't' all day long!"
Jack (sadly).-"Well. muvver, just fink what it must be for me! "-Punch.

## Arbor and Bird Day Programme.

Every teacher should aim to make the schoolhouse and its surroundings clean and beautiful. Divide the scholars into committees weeks before Arbor Day, and assign to each their duties under the teacher's direction. Have frequent reports and meetings of these committees to see that they are doing their work. Assign to one committee of girls the cleaning and decorating of the schoolroom: to another of boys the making of a neat gravel walk from the door to the road; to another the gathering up of all waste paper and debris in piles and cearing the grounds; to another the laying out of the grounds and selection of trees and places to plant them; a programme committee consisting of the teacher and larger gir!s and boys to prepare for an Arbor Day entertainment, and to send out invitations to parents, trustees and other visitors; a "school garden" committee to form plans with the trustees for breaking up, preparing and fencing ground for a garden, and getting contrilutions of sceds. (Read "Echoes from a Bovs' Garden" in this number in order to get a little inspiration).

Plant shrubs as well as trees. A good shrub is far better and more sight:y than a lank, half-starved tree. Viburnums (withe-rods), dogwoods, sumach. elder, wild roses, Canadian holly, lilacs, are goorl shrubs to plant, especially in sheltered places of the school yard; and they may be fonnd everywhere. The white pine is a beatiful evergreen, and can be made to grow in the dryest and least sheltered of spots. Elms, mapies, birches, poplars are all good trees to plant where the soil is not tho dry.

Readings and Recitittons.
Appropriate material may be gleaned from this and other April numbers of the Rewifw, and from books and magazines, for programmes. Do mot have too long an entertaiment. Remember that the most important work is the cleaning up of schoolroom and gromeds, the planting of shrubse and trees, lessons on plant lite, and the getting parents and trustees interested in your work. Then a suitable and well-rendered programme amid cean and appropriate surroundings will be most proper for Arbor Day itself.

Aunt Sarah's Arbor Day (Reading for a (iirl).
She was as pleasant as she was poor. Whe the boys and girls in the neightworhood called her Sunt Sarah; yet she was not a real aunt to one of them. In fart, she had not a single relative in ald the world.

One day Aunt Sarah was telling the boys alont
a beautiful elm tree which used to grow beside her old home. "I would be so happy," she said, "it there was only an eln tree in my yard now. I have so much time on my hands, I conld watch its leaves come and go each spring and fall, and it would be such good company for a poor old body, who lives alone as I do. But there is no way for me to ever get such a tree."
"She needn't be too sure of that," mused Ted Brown. But he said nothing till he and the other boys were on their way home from their call on the old lady. Then he began:
"Tell you what it is, fellows, day after to-morrow is Arbor Day, and I say let's go into the fields tomorrow and get a little elm tree to pant under Aunt Sarali's window. Nother will let me invite her to our house to spend the day. And you can plant the tree while she is away."
"So we can," cried the other boys, crowding very close to Ted.

Aunt Saraln was invited to spend the following day at Ted's home; and the boys planted in her yard the most beantiful elm tree they could find. Ted would not harness the horse to drive Aunt Sarah home until it was so dark that she could not see what had been going on in her gard. But when she awoke next morning she found it was Arbor Day indeed, for the branches of the dainty elm kept blowing against her window-pane as if to say, " (iood morning."-Selected.

Fall Fashions (Recitation for a (iirl).
The maple owned that she was tired of always wearing green,
She knew that she lad grown of late too shably to be secu.
The oak and beech and chestmut then deplored their shabbiness,
And all execpt the hemlock sad were wild to change theit dress.
"For fashion plates we"ll take the flowers," the rustling maple said,
"And like the tulip I'll be elothed in splendid gold and rect."
"The cheerful sunflower suits me best," the lightsome beech replical,
"The marigotd my choice shall he," the chestnate spoke with pride.
The sturily oak took time to think, "I hate such glaring hutes;
The gilly flower, so dark and rich, I for my model chose." So cuery tree in all the grove, exept the hemlock sad.

- lecording to its wish, ere long in brilliant dress was clad.

And there floy stand through all the soft and bright October days,
They wished to be like flowers, indeed they look like lage benuquets. -Sil.

## Quotations.

Then rears the ash his airy crest, Then shines the birch in silver vest, And the beech in glistening leaves is drest, And dark between shows the oak's proud breast, Like a chieftain's frowning tower. -Scott.
Plant in the spring time the beautiful trees, So that, in future, each soft summer breeze, Whispering through trec-tops may call to our mind, Days of our childhood then left far behind.
Days when we learned to be faithful and true,
Days when we yearned our life's future to view,
Days when the good seemed so easy to do,
Days when life's cares were so light and so few. -Scl.
When April comes, I tell you what,
The little leaves begin to plot,
And plan and ponder how to bring
Their greenness to the eyes of spring.
'Tis then they say (the cunning elves),
"The time has come to show ourselves.
We must make haste, indeed, if we
Would glorify each bare-boughed tree." -Sel.
Do yon know the trees by name
When you see them growing
In the fields or in the woods?
They are well worth knowing.
Watch them, watch them when their leaves
Everywhere are showing,
Soon you'll know the different trees
When you sce them growing. -Scl.
"Wake robin, wake robin, O robin dear,
Come from the marsh thicket, For springtime is here."-Sel.
Oh birds, that warble to the morning sky,
Oh birds, that warble as the day goes by,
Sing sweetly.-Tennyson.
Recitation (for four Girls.)
First.- Arbor Day has come again,
Hear the robins sing!
. All the birds are building nests,
In the early spring.
Second.- Arhor Day has come again,
And the brook that flows,
Down beside the willow tree,
Whispers of the rose.
Arbor Day has come again,
There's music in the breeze,
So thpon an April day
We go a-planting trees.
Fourth.- - Arbor Day has come again,
Alark! the songbirds' call!
All the flowers hear their song,
They waken one and all!
April showers, April showers,
Waken all the slecpy flowers,
Earth's refreshed loy April rain,
And Arbor Day is here again!

## Recitation (for five Boys).

First.- The old oak tree is the forest's pride, The birds in its branches swing,
The breezes rustle its leaves with song, In the early days of spring.
Second.
Oh, slender willow we plant to-day, Your branches hold much joy,
We will borrow your twigs next year, And make whistles for each boy!
Third.-
Oh, the tree that I love the best
Is the maple with branches high,
The song birds build in its safe retreat, It makes cool shade for the passerby.
Fourth.-
The poplar tree grows straight and tall, With its branches toward the sky, The little birds gather in merry throngs, And build nests in the branches high. Fifth.

The shapely spruce, green all the year, Is the best tree, you'll agree,
For when old December comes,
'Twill be a Christmas tree!
All.
Then give three cheers for the shady trees, And for the bird's song sweet,
We'll go with them on Arbor Day, . . To their green retreat.
-Selected (and altered).
Spring Call (to the Birds).
Spring once said to her fairies three:
"Call the birds to each bush and tree.
Make them welcome, bid them come
To live and love in their northern home."
Cho.-Tra la la, la la, etc.
Soon there came, at the fairies' call, The birds and birdies great and small.
Singing sweet their songs of glee,
They flocked around the fairies three.

## What a Bird Thought.

I lived first in a little house, And lived there very well.
I thought the world was small and round, And made of pale blue shell.
I lived next in a little nest, Nor needed any other.
I thought the world was made of straw, And cared for by my mother.
One day I fluttered from the nest, To see what I could find.
I said, "The world is made of leavesI have been very blind."
At length I flew beyond the trees, Quite fit for grown up labor.
I don't know how the world is made, Nor neither do my neighbors.

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A gush of bird song, a patter of dew,
A cloud, and a rainbow's warning,
Suddenly sunshine and perfect bluem
An April day in the morning. -Selected.
The Sower.
"Come, wild Wind," said the Catkin folks, "Loiter not on the way.
It is time for us to plant our seeds; We need your help to-day."
The jolly wild Wind whisked merrily by, And never a word did he say;
But birch and willow and alder trees He planted by scores that day.
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-The Youth's Companion

## For the Blackboard.

I. The groves were God's first temples.
2. Man counts his age by years, the oak by centuries.
3. The courteous tree bows to all who seek its shade.
4. As thou sowest so shalt thou reap.
5. How delightsome to linger 'mid the shady bowers.
6. Tiny seeds make plenteous harvests.
7. The tree is a nobler object than a king in his coronation robes.
8. A thing of beauty is a joy forever.
9. A father's hand hath reared these venerable columns.
10. Earth with her thousand voices praises God.
II. Spring unlocks the flowers to paint the happy soil.
12. God the first garden made, man the first city.

Planting Song (after the planting).
Air, "America."
Grow there and flourish well
Ever the story tell
Of this glad day
Long may thy branches raise
To heaven our grateful praise,
Waft them on sunlight rays,
To God away.
Deep in the earth to-day
Safely thy roots we lay,
Tree of our love;
Grow thou and flourish long;
Ever our grateful song
Shall its glad love prolong
To God above.

- Normal Instructor


## Arbor Day Questions.

Are you sure that you realize the importance of Arbor Day?

Do you know these things: That forests determine to a great extent the mean temperature of a country, making air currents cooler by day and warmer by niglit?

That destructive floods are caused by eutting down forests near the course of a river?

That forests act as rescrvoirs, holding in their vast network of roots moisture that in time of
drought will be drawn upon to prevent lasting injury to vegetation?

That in countries where there are large forests, the evaporation from the surface of the earth is only one-fifth as great as in open countries?

That six per cent more rain falls yearly in forests. than in open fields?

That land may be rec!aimed by tree-planting?
That trees perform a valuable service to health in setting free so much oxygen by action on carbon dioxide in the air?

That we draw every year \$700,000,000 worth of products from trees?

That $\$ 300,000,000$ of trees are destroyed by fire every year in the United States?

That at the end of each day we have 30,000 acres less of lumber than at the end of the previous day?

That if we continue to destroy trees as rapidly in the next two or three hundred years as in the past, the welfare of country will be seriously endangered?

If you know these things, you are ready to make your Arbor Day programme strong and helpful.Selected.

## Language of the Birds.

The poets have now found a language for the birds, which they translate into human specch. What they say is not the same to each listening ear. Dr. Van Dyke, a true bird-lover, in one of his many delightful poems about then, confesses which is lis favorite, and says:

> "That if but one of all the birds Could be my comrade everywhere, My little brother of the air, l'd choose the song sparrow, my dear, Recause he'd bless me every year,
> With 'Sweet-sweet-sweet-very merry cheer."

Professor Walton, Leeds, in his new work, The Principles of Teaching, expresses the opinion that the oral lesson has a mischievons tendency to proclnce idleness on the part of the pupils of all but the yotugest classes, which tendency, he considers, may be corrected by teaching them how to make use of books the main instruments of their afterculture.

Corporal punishment in a public school int Japan is unknown; the very thought of it to the Japanese mind signifies barbarous vulgarity and piteous lack of self-control on the part of teacher and pupil, mainly that of the teacher.

## Echoes from a Boys' Garden.

Louise Klein Miller in N. Y. School Journal.
"Is this the place for the garden?" said. Dick, as he gazed at the recently plowed and harrowed ground, full of witch grass, weeds and glacial boulders.
"Yes," I said, "isn't it a good place to work?"
"I should think it is a good place to work!" he replied, with a rather savage emphasis upon work.
" May I have the first garden?" asked Robert.
"You know what is expected of the first garden," I cautioned.
"I should like the second," cried Mike.
" Don't be in too great haste ; we must examine the plan of the garden first." At this suggestion they all arranged themselves to study the plan which was spread out on the grass before them.
"Is this the whole garden?" inquired Joe, who seemed to think it rather small.
"No, indeed! I explained. "It is the plan of a garden to be planted by each boy, and drawn to a scale one-fourth of an inch to a foot. Do yout understand what that means?"
"Does each fourth of an inch on the plan stand for a foot in the garden?" questioned Joe.
"What else could it mean?" said Dick.
"It is two and a half inches wide; how wide is the garden, Carl?" I inquired.
"That's easy," said Carl; "ten feet wide."
"It is twenty-two inches long; can you figure the length of the garden, Fred?" After some hesitation Mike offered to get him a big piece of paper and a long iead pencil.
"I know that," said James; "ninety feet."
"Good!" I exclaimed. "Now, boys, each of you is to have a space, ten feet wide and ninety feet long, to plant and keep in order. Can you do it?"
"Yes." "Of course!" "I should think so!" "We'll try!" "We conl'd take one twice as large!" and other exclamations came in chorus.
"Roy, I want you to try to direct this work. The plan indicates ten feet for flowers, ten for squashes. six each for lettuce, radishes, carrots, beets; then a four foot path; six feet each for tomatoes, turnips, peas, and beans, and nine cach for corn and potatoes."
" Does each boy plant all these things?" inquired Dick.
"Yes," I replied. "Now we will lay out the garden. Here is the measuring tape. I will hold one end, and Henry, you take the other. Each boy get a stake. Roy, take the plan and show the boys
where to drive the stakes. Be careful; that line is not quite straight. We want everything done 'shipshape.' That is better," I discovered, looking along the line.
" Is that all right?" inquired Roy, his face flushed with excitement.
"Yes, you did that very well," giving him a nod of approval.
"Robert, would you like to direct the staking off of the front of the garden?"
"Thank you, I should. Are the gardens to be close together?" he asked, examining the plan for assistance.
"No, see, there is to be a foot-path between the gardens," pointing to the plans.
" May we do it all ourselves?" asked Robert.
"Yes, if you can. Be sure you are right and then go aliead. As soon as you have finished you may select your gardens and give me your names and the number of your gardens."
"What shall we do next?" inquired Mike, anxious to get to work.
"You may stake off your own garden now, and to-morrow we will begin the planting."

When we said good-night I felt the hardest part of the work had been done.
"What are these?" inquired Henry, as he examined some plants in a box.
" Don't you know a tomato plant when you see it?" asked Dick, with apparent disgust.
"Hand me a plant, will you pleạse, Fred. You know, boys, that plants, as we. 1 as animals, take food in order to grow. Where will this plant get its food?"
"The roots will take some food from the ground," said Carl, "and I think the leaves take some from the air."
"Carl is right, but can these roots take up particles of soil?"
" No," said Mike; " they must have water, too."
" When you drop a lump of sugar into a cup of tea, what happens to it?"
" It melts," cried Dick.
"It dissolves," said Henry, deliberately.
"Can you see it after it đissolves?"
"No."
"When you drink the tea what do you take also?"
"Sugar," came the reply.
"Why will the tomatoes and all other plants in the garden require rain or moisture?"
"I know," cried Carl; " to dissolve the soil so the plants can use it for food."
"Each boy takes three plants. Be carcful; do not injure the delicate root tips," I said, carefully removing a pant from the box,
"Where shall we plait them?" demanded Joc, rather helplessly.
"Examine the plan It will show you just where to put them. Spread the roots out so they may get plenty of food. Well, that is a good beginning."
"Are these the potatocs?" asked Roy, after he had planted his tomatoes. "How many shall we plant?"
" It is about time you are doing some gardening," said Mike, with apparent amazement. "Don't you know you don't p.ant potatocs? That you have to cut them up into pieces?"
"Cut then u!! " satid Roy, in surprise; " how, this way?"
"You plant that piece without any eyes and see how many potatoes "you get from that hill!" said Nike.
"Are you all ready, boys. We will take the potatoes next. 'They, are thickened unclerground stems or tubers. We do not plant the whole potato, but cut them up into pieces, each having two "eyes" or 'buds.'
"What do you do that for?" persisted Roy.
"The white part of the potato, which is used for food, is the material the plamt stored away to develop these buds. A new plant will grow from each strong eyc. liy the time this sumply is caliansted the plant is strong enough to take fook from the ground and the atmosphere."
"What makes potatoes shrivel up in the cellars after they have sent out their tender sprouts?" asked Dick.
"Can you answer that question from what I hate said? Think it over. In a few days we will pull up a plant and see how it has grown."
"Shall we plant the potatoes as we did the tomatoes?" asked Joe.
"No; make a straiglit furrow, put in some manure and a small quantity of commercial fertilizer where you expect to put the potatoes. Be careful to mix the soil thoroughly. The plan will show you where to plant them. Then you will have to spend some time fighting weeds."
"I never saw so many weeds in all my life." satid Hugo, in a discouraged tone of voice.
" But, my dear boy, remember, every time you pull up a weed or hoe your garden, you loosen the soil, and a farmer would say you set free the plant food in the soil. If it were not for the weeds, cornfields would not often be plowed or gardens hoed. Keep at the weeds, Get all of them out. It is a good thing for the garden, and will pay."
" It is easy enough to get rid of the weeds, but just look at those rocks!" exclaimed Mike, the great beads of perspiration on his freckled nose. "Do they grow like weeds? I am sure they are getting larger every day."
" When you take to gardening, there are a great many things for you to learn."
" Where did all these rocks come from?" asked Henry.
" They are glacial boulders, and were brought from the north by the great ice plows or glaciers. (irowing larger? No, indecd! They are gradually becoming smaller, breaking up, and forming soil. They have had an interesting history which you will enjoy learning some day. Take out all you can with the wheelbarrow. This is good weather and things will grow well."
(Concluded in 'May number.)

It is said that when the Danes made war on Scotland, one dark night as they were marching on an ecampment of sleeping Scots, one of them trod upon a thistle. 'The pain was so sudden and intense that the man gave a lond cry. This awakened the slumbering Scots, who sprang to arms and defeated their assailants. In gratitule for their deliverance the Scots from that time on made the thistle their national cmblem.

## The Song of a Robin.

I heard a robin singing, When the word lay white and drear,
And ne'er a ray of sumshine fell His little heart to cheer;
I listened to the gladness That was mingled in his song, And from my heart the shadows fell Of weary years and long.
I heard a robin singing. When the skies were dark above, Aud from the song a lesson learned Of hope, and trust and love.
It spoke to me of patience, Of a pring our hearts shall know, When snows of winter falleth not And cold winds never bow. -Kathlecn W'eatherhicad, in U'estminster Gazette.

## Recitations for Little Children.

## Under-the-Table Manners.

It's very hard to be polite If you're a cat.
When other folks are up at table
Eating all that they are able, You are down upon the mat If you'se a cat.
You're expected just to sit If you're a cat.
Not to let them know you'se there
By scratching at the chair, Or a light, respectful pat If you're a cat.
You are not to make a fuss If you're a cat.
Tho' there's fish upon the plate
You're expected just to wait, Wait politely on the mat If you're a cat.

> -Teachers' Magazine.

If I knew the box where the smiles are kept,
No matter how large the key,
Or strong the bolt, I would try so hard-
'Twould open, I know, for me.
Then over the land and the sea broadcast
I'd scatter the smiles to play,
That the children's faces might hold them fast
For many and many a day.
If I knew the box that was large enough
To hold all the frowns I meet,
I would like to gather them every one,
From nursery, school, and street;
Then, folding and holding, I'd pack them in, And turn the monster key,
I'd hire a giant to drop the box
To the depths of the deep deep sea.

## -Selected.

## Four Dogs.

There were four dogs one summer day Went out for a morning walk,
And as they journcyed upon their way
They began to laugh and talk.
Said dog No. I, "I really think
My master is very wise;
For he builds great houses tall and grand That reach clear up to the skies."
Said $\operatorname{dog}$ No. 2 in a scornful tone,
"Ho! Ho! That's wonderful-yes!
But listen to me! My master writes books, He's sold a million, I guess."
Then dog No. 3 tossed his curly head And gave a sly little wink.
"That's nothing to tell! My master is rich, He owns half the world, I think!"
The fourth little dog had been trotting along With a wise, reflective mind.
A last he said with a happy smile, " A 1 y ; master-he is kind!"

Now if your opinion should be asked, I wonder what you would say-
Which dog paid the sweetest compliment
To his master on that day

- Alice J. Cleator, in Pets and Animals.


## My Little Gray Kitten and $I$.

When the north wind whistles 'round the house Piling the snowdrifts high,
We nestle down on the warm hearth rugMy little gray kitty and I.
I tell her about my work and play, And all I mean to do,
And she purrs so loud $I$ surely think
That she understands-don't you?
She looks about with her big round eyes, And softly licks my face;
As I tell her about the word I missed, And how I have lost my place.
Then let the wind whistle, for what to us Matters a stormy sky?
Oh, none have such jolly times as weMy little gray kitty and I.
-Florence A. Jones in Pets and Animals.

## Which One Was Kept.

There were two little kittens, a black and a gray, And grandmamma said with a frown-
"It will never do to keep them both, The black one we'd better drown.
"Don't cry, my dear," to tiny Bess, "One kitten's enough to keep;
Now run to nurse, for 'tis growing late, And time you were fast asleep."
The morrow dawned, and rosy and sweet Came little Bess from her nap;
The nurse said, "Go into mamma's room And look in grandma's lap."
"Come here," said grandmamma, with a smile, From the rocking-chair where she sat;
"God has sent you two little sisters, Now, what do you think of that?"
Bess looked at the Babies a moment, With their wee heads, yellow and brown,
And then to grandmamma soberly said,
"Which one are you going to drown?"
-Lillian Street, in "Ideal Home."

## Tokens.

I know that Spring has come,
Because to-day I heard a wild-bee's hum;
I found a wind-flower on the warm hillside, A cowslip where the brooklet's waters hide; And looking at the tree tops far away, I saw a touch of green light up the gray. Within a door, framed in sunshine rare, I saw a child with golden ringlets bare, Watching a robin; by these tokens clear I know that Spring is here!
-Ninette M. Lowater.

## Talks With Our Readers.

Miss Jane Brown, Bathurst, N. B., writes as follows: "I am sorry that 'Subscriber,' who writes in the February Review, finds any difficulty in getting pupils to take a real interest in studying Hay's History of New Brunswick. Ever since the book was published I have been teaching it. And I have found my pupils enjoy and easily understand it. Of course, we first took it up orally, and afterwards the children greatly enjoyed reading it, and writing short stories abont what they had learned. I cannot see why young children should find difficulty in understanding history as it is treated in that book."
G. E. S., Andover, N. B., asks for a list of New Brunswick governors and also for King Edward's full name. Governors of N. B. before confederation: Col. Thomas Carleton, Major General George Tracey Smith, Sir Howard Douglas, Major General Sir Archibald Campbell, Major (ieneral Sir John Harvey, Major General Sir William Colebrooke, Sir Edmund Head, Hon. J. Henry Thomas Man-ners-Sutton, Hon. Arthur H. Gordon. Since confederation: Hon. L. A. Wilmot, Hon. S. L. Tilley (twice Lieut. Governor, from 1873 to 1878, and from 1885 to 1893), Hon. E. B. Chandler, Hon. R. D. Wilmot, Hon. John Boyd, Hon. J. J. Fraser. Hon. A. R. McCletan, Ilon. J. B. Snowball, and the present Lieut. Governor, Hon. L. J. Tweedie.

King Edward VIl's name is Albert Edward.
Mr. H. A. Garland, of Salisbury, N. B., wishes for an inexpensive text-book on the new language, Esperanto, with grammar, vocabulary, etc., a dictionary, with prices and where they can be obtained. Can Dr. Creed or any one write him and give the desired information?

No one who is interested in education can afford to overlook an illuminating paper by Professor G. H. Palmer, of Harvard, on The Ideal Teacher, which appears in the Atlantic Monthly for April. It is a high standard he sets here : he admits himself that it may be unattainable; but there is inspiration in it.

The National Elucational Association will meet this year in July, at Los Angeles, Cal. Among the invitations for next year is one to meet at Toronto.

Set about doing gend. One act of kindness will have more influence on the spirit than all the salt water baths that ever were invented.-E.r.

But all the same, the baths need not be omitted.

## The Teacher's Wisdom.

The ideal teacher must be in possession of a wealth of accumulated wisdom. These hungry pupils are drawing all their nourishment from us, and have we got it to give? They will be poor, if we are poor; rich if we are wealthy. We are their source of supply. Every time we cut ourselves off from nutrition, we enfeeble them. And how frequently devoted teachers make this mistake! dedicating themselves so to the immediate needs of those about them that they themselves grow thimer each year. We all know "the teacher's face." It is meagre, worn, sacrificial, anxious, powerless. That is exactly the opposite of what it should be. The teacher should be the big bounteous being of the community. Other people may get along tolerably by holding whatever small knowledge comes their way. A moderate stock will pretty well serve their private turn. But that is not our case. Supplying a multitude, we need wealth sufficient for a multitude. We should then be clutching at knowledge on every side. Nothing must escape us. It is a mistake to reject a bit of truth because it lies outside our province. Some day we shall need it.-Prof. G. H. Palmer, in the April Atlantic.

President Charles W. Eliot, of Harvard: "More important than pensions for school teachers is better air in schoolrooms, expert instead of amateur supervision, and what the commmity needs also in its teachers is to have them become more robust and gayer persons. A pension for teachers, however, is not a serious additional burden on taxpayers. For in the increased efficiency of the teachers themselves, the account is more than equally balanced. I believe that the time of miversal pensions is nearer at hand than many persons think."

The reason that birds do not fall off their perch is because they they camot open the foot when the leg is bent. Look at a hen walking, and you will see it eloses its toes as it raises the foot and opens them as it tonches the ground.-E.r.

The Review is very interesting and a great help to the in my work. I find the pietures and our talks on them of lively interest to the pupils.

Hofe Crandanl.
liristol, N. B.

## Natural History for Little Folks.

 Our Daily Bread.The bread and cake you eat at tea are made of flour by the baker, and the miller grinds this flow from the wheat which he buys from the farmer.

The farmer ploughs the field and sows little seeds of corn. A wheat seed is a tiny thing, smaller than the nail of your little finger, with a thin, hard husk, and white flour inside. In the midst of the flour there lies a very thin germ, not so big as a pin's head.

This germ sleeps in the seed like a baby sleeps in the cradle, but out of the tiny germ grows a blade as tall as a tall child, with roots and leaves below and an ear of wheat at the top. In the ear there are again many new seeds, more than the fingers on your hands, which have all sprung from the one seed which the farmer laid in the earth. The farmer sowed one sackful in the spring, but he brought home many full sacks in the autumn.

One seed is eaten by a beetle, another is carried by the field-mouse to her little ones in the monsehole, a third the lark eats for his breakfast, after which he sings a glorious song of thanks, and a fourth the sparrow swal.ows for his lunch, while the hen takes a few for her supper that she may lay another egg to-morrow. The doves and the geese have their share thrown to them, and the cow and the horse enjoy their feed of corn in their stalls, but there will still be many, many grains left, and of these are made corn-liour and vermicelli, besides charse and fine flour for people all over the world.

## A Young Monkey.

This little monkey was born in the crown of the highest palm tree where he was the only child of his devoted mother. Round about him swayed the delicate fans of the tree, bright chusters of blossoms and branches of frut hung round his cradle, and the wind rocked it gently. The air was sultry, and the vast forest lay dark and quiet deep down below, with a tangle of phants covering the swampy: gromud. J'ine apples, fig: and cocoanut pahns grew there lye the side of tall sugar canes. For a long time the young monkey clung to his mother's neck, till the had learnef to climb alone along the swaying creepers that were slang from one tree to another, while expaisite butterlies flattered romad him and parrots grected him with lowd shrieks.

The dol monkeys, his parents, tow the greatest we of him, and his mother carrici him down to Ah... springe to wash his hatle Bace, Which she did in
spite of his screams and strugg'es. Sometimes, when the monkey family was resting in the heat of the day, a glistening, poisonous snake would slide noiselessly up with murder in her heart, but father monkey, always on the alert, would spy it instantly, and give the signal for flight.

The little one was weil taken care of, but, on the other hand, he had to learn the strictest obedience. When a lot of old monkeys were gathered together, discussing-who knows what?-and the little one popped his inquisitive head among the bearded elders, a tremendous box on the ear was his reward, that sent him, a howling, but wiser little monkey, back to his fond mother's arms. . She taluglt him to elimb up and down the strings of twining plants, and, swinging by his tail, to seize the distant brancly of a tree, and to hide behind the dark foliage. If a shadow stolc over the leaves she disappeared with him, quick as lightning, into the thickest mass of creepers and showed him overhead the much feared eagle, who was ready to dive through the crowns of the trees to seize the unobservant with bis deadly sharp claws.

Sometimes at night, in the forest tangle, something stirred, and two gleaming eyes glowed through the darkness. A jaguar was abont to fall upon the sleeping monkeys on the tree, when they fled in terrified haste to the attermost ends of the branches. There they hung by their tails and swung in mid-air where the robber could no longer seize them.

Another time, the mother showed her young one where the sweetest fruit and berries of the forest were to be found, and tanght him how to open the nuts and how to sort the kernel from the shell. At night they listened to the wonderful concert which the other monkeys were giving in the wide crests of a giant tree, twenty at a time sitting round about in the branches with the moon for their lamp and the sparkling fire-flies and glow-worms for candles. One bearded monkey would begin with an earsplitting how, and sing miformly and drearily alone for a time, till suddenly the whole chorus joined in with full strength. So that the uproar could be heard a mile off through the halls of the forest, and the sleepers about were aroused. Then the young monkey joined with the others in the song, and his mother was prond of her well-broughtup) little son.

## The Spider.

Once upon a time there was a little spider, who came from out of the garden into a room, and hid
behind a cupboard. There she sat all day in a corner and no one noticed her, but when it was dark and the people were asleep, she came out and began to spin a web on the wall. She had four big eyes and four little ones, and with these she could see as well by night as she could by day. She needed neither candle nor lamp to work by.

In her body she had spinning glands, and from them she spun thin threads, drew them this way and that and made a fine web of them. In it she meant to catch the flies that are so troublesome to people, and gnats that bite and worry children. With her eight legs she wove the threads into each other, putting little sticky knots upon them, and on these the flies and gnats were to stick with their wings as they flew by. Finally she wove at the end of the web, sheltered in the corner of the room, a little tube-shaped house for herself. In this she sat, looking out of the opening as if it were a window.

When morning came with bright daylight all was ready. She had worked very hard, and was as happy and as proud of her work as ever a spider could be. She had built her house well, and it was all neat and proper.

And now you might suppose that people took a delight in this industrious little spider, and admired the beautiful net which was to catel the tiresome flies. But you will sec.

When the mother came into the room with her child, and saw the spider's big wel) and the spider, she took a brom, swept them off the wall, and threw then into the yard. "That spider had worked hard," she said, " and did more in this one night than many a man works in a week, but it did its clever work in the wrong place. It shonld spin its web in the yard or the garden, but not in the rom. Do your work well, and do it where it is wanted."

An Irish priest had laboured hard with one of his flock to induce him to give up whiskey. "I tell you, Michacl," said the priest. "whiskey is your worst enemy, and you should keep as far away from it as you can." "Me enemy, is it, Father?" responded Michacl, "and it was Your Riverence's self that was tellin' us in the pulpit only last Sunday to love our enemies!" "So I was, Michacl," rejoined the priest, "but I didn"t tell you to swallow them."-Sacred Heart Reaicu'.

How the chiblten did enjoy the pieture in the March Review!
G. Y. B.

## A Spelling Test.

Infallible, liquefy, scandal, diamond, academy, glimpse, beggar, forfeit, internally, harangue, immense, financier, chief, malicious, heifer, pronunciation, ominous, rampant, assessor, lucid, vaccinate, ventilation, utterance, adverse, likelihood, assailant, indictment, Pennsylvania, biennial, pianos, martyr, vagrant, pyramid, verbal, grievance, Binghampton, salad, aqueduct, volcano, refer, referring, referred, reference, elementary, subtrahend, miscellaneous, preliminary, platinum, participle, convergence.

Have written on the blackboard in a corner that is not likely to be needed the name of every pupil in the room. Opposite each name, have five small squares, one for every day of the school week. Let each pupil, when he comes in, put a red mark after his name, if he is on time. If tardy, he must put a blue mark after his name, and if absent the square for the day is a blank. It is a very gratifying sight to the children to see a row of five pretty red crosses after their names, and the friendly rivalry which comes from it is a spur to their ambition to be regular in attendance, and to be right on hand by 9 oclock every morning. - Ex.

A young Frenchman who was learning English while on a tour with an American attendant, exclaimed, "O my, I am all of a sweat!" "Miss Morceat," exclaimed her attendant, "never use that word again! Horses sweat. Men perspire. Ladies merely glow."

> Dare to do right; dare to be true!
> The failings of others ean never save you.
> Stand hy your conscicnce, your honor, your faith,-
> Stand like a hero and battle till death.
-Wilson.
Be firm! One constant element in luck Is genuine, solid, old, Teutonic pluck.
-Holmes.
A smile, and then two merry cyes
To make the pleasantest of skies, A laugh, or many, if you please, To make the sweetest summer brecze, All these, if used well and aright Will even make a dark day bright.
-Phoebe Cary.

In life's small things be resolute and great To keep thy muscles trained; know'st thou when Fate Thy measure takes, or when she'll say to thee, "I find thee worthy; do this deed ior me!"
-Lowell.

## Number One.

" He is a number one boy," said grandmother, proudly. "A great boy for his books; indeed, he would rather read than play, and that is saying a good deal for a boy of seven."
"It is, certainly," returned Uncie John; "but what a pity it is that he is blind."
"Blind?" exclaimed grandmother, and the number one boy looked up, too, in wonder.
"Yes, blind, and a little deaf, also, I fear," answered Uncle John.
"Why, John! what put that into your head?" asked grandmother, looking perplexed.
"Why, the number one boy himself," said Uncle John. "He has been oceupying the one easy-chair in the room all the afternoon, never seeing you nor his mother when she came in for a few minutes' rest. Then when your glasses were mislaid, and you had to climb upstairs two or three times to look for them, the neither saw nor heard anything that was going on."
"Oh, he was so busy reading!" apologized grandmother.
"That is not a very good excuse, mother," replied Uncle John, smiling. "If " Number One' is not blind nor deaf, he must be very selfish indeed to occupy the best seat in the room and let older people rim up and down stairs while he takes his ease."
" Nobody asked me to give up my seat, nor to run on crrands," said Number One.
"That should not have been necessary," urged Tnele Jolin. "What are a boy's eyes and ears for, if not to keep himp posted on what is going on aromed him? | am gled to see you fond of books; but if a pretty stury makes you forget all things except amusing 'Nunber One,' better rum out and play with the other seven-year-old boys and let grandmother enjoy the comfort of her rocker in quict." -Youth's Erangelist.

We punctuate to make written or printed matter easier to read. The punctuation indicates the relation of the clauses to me another. For example, read this:

That that is not that that is not is not is not that it it is.

Now (bserve what punctuation with the proper inflection of the voice will do toward making the meaning plain:

That that is, is; that that is not, is not ; is not that it: It is.

## CURRENT EVENTS.

Het Volk, (the People,)-meaning, of course, the Boers as an organized political party,-have won in the elections in Transvaal; and Gen. Botha, one of the leading generals of the Boer side in the late South African war, is the new prime minister of the Transvaal Colony. The first parliament under the new constitution was opened on the 2rst of March, both the English and the Dutch languages being used in the debates. That the same men who recently conducted the war against the British should have thus frankly accepted British sovereignty and be now enacting British laws for their country, loyal to their new allegiance and ready to build up a new South Africa under the British flag, is striking evidence of the wisdom of the British policy of granting self-government to new subjects at the earliest possible day. The Dutch premier of the Transvaal will probably meet the French premier of Canada in the Colonial Conference which is soon to assemble in England.

The little war in Central America seems to have ended with the defeat of Honduras and the trimmph of Nicaragua; but Salvador and Guatemala may attack the victor, fearing that the strength of Nicaragua would endanger their independence. School children wonld like to see the map of Central America simplified; and will see it when the people of the unhappy little republics learn that there is a distinction between freedom and independence.

The famine in China is having a serious effect upon the political situation, and fears are expressed that it may lead to an uprising against the present dynasty. Prompt relief is asked from motives of humanity, as well as to avert the threatened outbreak of sedition. A general movement throughout the civilized world to aid the sufferers may be necessary, for the sufferens are many and the need is great. The viceroy of one province has asked for a million dollars, for the purchase of food.

The spirit of progress is abroad in India. An extension of the representative element in the legislative councils, a larger employment of Indians in the higher offices of state. the development of resources and the encouragement of manufacturers and commerce are advocated; but the Mohammedans, who are numerically in the minority, are opposed to full representative government.

The Canadian parlianent will close its session early this month, so that the premier and other members of the calinet may attend the Colonial Conference in London.

Esperanto, the new international language, continues to make rapid progress. Jt is tanght in many Japanese schools; and there is an Esperanto journal published in Pern. It has already been used in more than one international congress, and is coming into use in commercial correspondence. In France and England the movement to mate it the mediun of communication for foreign trade is especially strong. The London Chamber of Commerce offers a syilabus of examinations for commercial education certificates, in which Freneh, German, Spanish, Portugese, Russian, Italian, Dutch or Esperanto is among the requirements for the junior grade; while for the senior two foreign languages, or one foreign language and Esperanto, are reguited.
"Around the World in Eighty Days" is still an interesting book, but the amount of time required for the journey could now be reduced lyy half. From Moscow to Vladivostok, over the Trans-Siherian railway, is a journey of a little less than two weeks. Less than a week is now required to make the journey from ocean to ocean over Canadian railways; and the journey across Europe to Moscow takes but two or three days, so all the overland travel can be done in three weeks. Another week gives ample time for crossing the Atlantic, and two more for crossing the Pacific, with two or thrce days to spare.

Fresh troubles in Morocco have caused the French cabinet to send troops to the seat of disturbance; the agrarian insurrection in Roumania is assuming alarming proportions, and there is another revolt in Venezuela. Of these, the latter movement is prohably of little moment beyond the bounds of Venezuela and the adjoining republic of Colombia; but the Roumanian and Morocean conditions may have graver results.

- lorty-six nations will send representatives to the conference which meets at the Hague at the elose of next month. Only twenty-six were represented at the first Hagne Conference. The first conference gave the the international court now known as the Hague Tribunal. If this second and greater conference gives ns anything of greater importance to mankind at large it can be little less than the fulfilment of Tennyson's dream-the parliament of man, the fedcration of the world.
The old alliance between France and Russia, the good understanding which now exists between Great Britain and France, and the close alliance between Great Britain, Russia and Japan which is said to be now almost assured, would seem to forbid war either in Europe or in Asia. The British and Russian governments have agreed upon a joint course of action if foreign intervention in Persia becomes necessary. Italy, Spain and Portugal will support Great Britain and France in any action that is needed on the shores of the Mediterranean. Japan, rapidly inereasing in strength, and India, unquestionahly loyal to British rule, make peace in the Far East if there is no further danger of a renewal of the Russo-Japancse war. But neither international alliance nor peace conference can make armies needless so long as the red flag of Socialism in most European countries threatens internal war.
British rule has brought proaperity and confidence to the people of Northern Nigeria, of which vast region a Canadian officer, Sir Percy Gironard, has been appointed high commissioner. The country is rich in agricultural possibilities, and capable of producing immense quantities of cotton. The new commissioner's experience in railway construction in Egypt and South Africa will cnahle him soon to provide transportation facilities; and the native chiefs are said to be eager for the introduction of "the white man's slaves," that is, machincry. The authority of native chiefs will be maintained and regulated; and, as usual, British rule will conserve all that is goorl in the native administration.
A British explorer, Major Powell-Cotton, who has recently returned from Central Africa, reports the finding of six animals hitherto unknown to naturalists. They include a tiger cat about the size of a leopard, an antelope armed with tusks, a new black and white monkey, and a huge red buffalo.

It is announced that the Dominion Govermment will build a railway to Hudson Bay as soon as possible to meet the urgent need that is now in plain sight for an additional and shorter railway ronte from the prairies to the water.

Oronlyateka is dead. His name will long be remembered in Canada as that of one whose character displayed the virtues of his race. As a representative of the Six Nations, in 1860, he read an address to the Prince of Wales, now King Edward VII, and so impressed his royal highness that he was invited to go to England to complete his education. Returning to Canada, he took up the practice of medicine. He sought admission to the order of Foresters. chicfly because only white men were before admitted, and he wished to break down the exclusion of the men of his own race. He soon rose to the head of the organization, which became the wealthiest among the fraternal orders in America. Great funcral display marked the passing of his borly through 'loronto, on its way to the Dohawh reservation where he had livel, and where it was finally laid in rest loy his own people in the little buria! gromed of the reservation.

The second Russian parliament is in session, and is quietly procecting with its work. There is much reason to lope that it (lemands will be more moderate than those of the former assembly, and that the government will be ready to concede them.

## SCHOOL AND COLLEGE.

Monnt Allison University has appointed as Rhodes scholar for New Branswick, George Douglas Rogers, of Sussex, N. 1h. Mr. Rogers possesses a union of the fualities, plysieial, social, intellectual and moral, which are to be considered in the election of a Rlodes seholar. Ile is now at Harvarl University where he is pursuing advanced courses in Latin and Greek.

Fo fill the vacancy in Truro, N. S., Academy, caused by Mr. W. R. Campbell's promotion to the inspectorate, Miss Jessie Campbell, B. A., of Paddleck, C. B., has been appointed until a permanent principal can be chosen.
The introduction of a measure providing for the establishment of an institute of technology has been postponed by the Nowa Scotia begislature until next year.
A Cniversity Club has been formerl at Wolfville, N. S.. composed of the teachers of the three institutions of Acadia Liviversity, the object of which is mental improvement and recreation.
R. G, D. Riclurrdson, B. A. (Acadia) and Ilh. D) (Yale), has been appointed assistant professor of mathematics at Brown Lniversity, and will enter on his duties in September next. Dr. Richardson is the author of several important mathematical works, is a member of the Amcrican Mathematical Society, and has recently been an instructor in mathematics at Yale L'niversity.

Dr. Gen. T. Kennedy, for more than iwenty years professor of Natural Science at King's College, Windsor, N. S., died at Wolfville, March ist. 1)r. Kemedy sturdied at Nefill ['niversity under the late Sir Wm. Dawson, and afterwards pursued a post-graduate conrse at Yale University. He was professor of Natural Science at Acadia, and afterwards at Kings College, which latter position be resigned on account of failing health about three years ago.

Mr. J. Arthur Estey, of Fredericton, who will graduate in June next from Acadia University, has been awarded the Nova Scotia Rhodes scholarship. Mr. Estey entered Acadia in 1902, winning the Freshman scholarship of $\$ 60$. He is a good musician, accomplished in ficld sports, and a thorough and capable student.

Mr. Hedley V. Hayes, late principal of the Alexandra school, St. John, has been appointed head of the manual training school which is to be opened in St. John at the beginning of the next school term. Mr. Hayes is an energetic and accomplished teacher, and may be relied on to make the new manual school a success. He is now finishing his course at the Normal Institute of Manual Training, Fredericton.

Mr. A. L. Dykman, principal of the Douglas Avenue school, St. John, has been appointed to the principalship of the Alexandra school, vacated by Mr. Hayes, Mr. W. R. Shanklin, of the Newman street school, St. John, has been appointed principal of the La Tour school; and Mr. J. G. McKinnon, teacher of grade six in the Leinster strect school has been appointed head of the Newman street school. Mr. W. A. Nelson, principal of the La Tour school, becomes principal of the Douglas Avenue school.

Mr. J. Simpson Lord, recently the successful principal of the Fairville school, and for nearly a year teacher of grade eight of the St. John high school, has resigned to accept the position of bookkeeper for Ganong Bros., St. Stephen. His position in the high school has been filled by the appointment of Mr, Reverdy Steeves, for several years a teacher in Albert County, N. B., and recently a boot and shoe dealer in St. John.

Mr. J. R. Sugrue, for twenty-three years a faithful teacher in St. Malachi's Hall school, St. John, has been appointed a tide-waiter in the customs service of that city.

Mr. C. Stanlcy Bruce, lately appointed inspector of the Countics of Yarmouth and Shelburne, has been succeeded in the principalship of the Shelburne County Academy by Miss Mabel McCurdy, B. A., of Onslow, Colchester Comnty, recently graduated with academic rank at the Provincial Normal School at Truro.

The historic town of Louisburg, C. B., is moving in the matter of providing better school accommodation. The present building does not furnish adequate facilities for the needs of the town and has been condemned.

Miss Mabel E. Bishop has been appointed vice-principal of Annapolis County, N. S., Academy.

Principal Peterson, of McGill University, annonnecs that affiliation with McGill of Prince of Wales College, Charlottetown, P. E. I., is now an accomplished fact. This is considered along with British Columbia plans of McGill to be an advance step in the interests of higher education in the Dominion. The first two years' courses at these colleges will be accepted at McGill.

The education department of Ontario has decided to supply every rutal schol in the province with a large Union Jack, upon which will be emblazoned the Canadian coat-of-arms. It is expected that this movement will help to develop patriotism and teach practical citizenship.

McGill University, Montreal, has decided to extend its medical course from four to five years, begimning with next September.

The University of New Brunswick Senate has decided to grant a retiring annuity of $\$ 400$ to Professor L. W.

Bailey, which, with an allowance from the Carnegie Foundation, will afford a retiring pension of nearly $\$ 1500$ a year. Dr. Brittain, as lecturer in chemistry, was granted a gratuity of $\$ 300$. Philip Cox, Ph. D., principal of the Chatham grammar school and Mr. Geo. W. Bailey are applicants for the position to be shortly vacated by Professor Bailey. Dr. Cox is a capable teacher and an enthusiastic all-round naturalist. Mr. Bailey will shortly receive his medical degree from McGill University where he recently completed his studies with a creditable record in natural science.
The. University of New Brunswick has established a chair of agricultural chemistry. The salary for the new position is \$1200 a year.

The annual convention of the New Brunswick Teachers' Association meets at Fredericton on April ist.

Mr. Raymond Ellis, of St. Dunstan's College, Charlottetown, is the winner of the Rhodes scholarship for Prince Edward Island this year. There were three other competitors. Mr. Ellis, who will graduate from St, Dunstan's College in June, is twenty years of age, has an excellent record in scholarship and in athletics.
The debate between students of the University of N. B. and Kings College, Windsor, N. S., took place at Fredericton March 21, and was won by the U. N. B. students.

## RECENT BOOKS.

Messrs. Houghton, Miffin \& Company, Boston, have published in their "Riverside Literature Series" Thomas Carlyle's lectures on Herocs, Hero-worship, and The Heroic in History, edited by John Chester Adams, Ph. D., of Yale University; price, paper 45 cents, cloth 50 cents; and James Russell Lowell's A Mooschcad Journal and other papers; price, paper, is cents. Both volumes are provided with notes, and that on Carlyle has a scholarly introduction well fitted to stimulate the beginner in the study of the author's thought and style.

Messrs, Adam and Charles Black, Soho Square, London, are publishing an authentic edition of Scott's novels with introduction and notes for school use. The text embraces corrections and improvements made by the author almost to the day of his death. The Talisman-the first of the set-is unique in style and binding; price, cloth is. From the same publishers there have been received selections of verse entitled Song and Story, for junior, intermediate and senior scholars-three volumes, paper, price 6d. each. The selections are all concise, from the best authors, and adapted for school recitations.

Tife Principles of Horticulture. Cloth, pages 166. Price 2s. By Wilfred Mark Webb, F. L. S., curator of Eton College Museum. Blackie \& Son, London.
This is a series of practical lessons, forming a useful introduction to horticulture or agriculture. Indeed, it is a very serviceable work for any student or for one who wishes to inform himself on the mysteries of plant life. With this little book as a guide, the structure and growth of plants may be followed with comparative ease by anyone desirous to make himself acquainted with plants. Hints are also given for microscopical and other experimental work as the student adrances, and there is a chapter on injurious insects and how to destroy them. The diagrams and illustrations are especially noteworthy for their clearness and suggestiveness.

EDucational Review wupplement, STMap, 1907.


# The Educational Review． 

Devoted to Advanced Methods of Education and General Culture．

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THE EDUCATIONAL REVIEW is published on the first of each month，except July．Subscription price，ooe dollar a year；single numbers，ten cent

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Addrese all correspondence 10
TIIE EDUCATIONAL REVIEW， St．Joha，N．B．

Tine Review is requested to state that all educa－ tionists visiting England during the week of the Federal Conference on Education in London，from May 24th to June 1st，will be cordially welcomed to its meetings．

The picture sent out with the Review this month is a copy of the well－known painting by West，＂The Death of Wolfe．＂A prize is offered for the best composition on this picture．All papers must be sent in on or before May ifth to Mr．Hunter looyd， Waweig，N．13．Competitors are requested to mote that the composition is to be written on the picture． and not on the incident，as related in history．

A forestry convention will be held in Yarmonth abont the end of this month．President R．H．

Campbell，of the Dominion Forestry Association， has signified his intention to be present．

Tine Eastern Teachers＇Association of Prince Edward Island will hold their eighth annual con－ vention at Georgetown on June 27th and 28th．An attractive handbook announces their programme．

We have received the calendar of the Harvard Summer School，which opens on July and and closes Angust 9th．Courses are offered in over thirty subjects，and special facilities are given to teachers．

The provisional programme of the Dominion Educational Association，which mects in Toronto， July 9－12，has been received．The meeting pro－ mises to be of more than usual interest，including， as it docs，sessions devoted to different depart－ ments－kindergarten，elementary，high school and training，and discussions and papers on matters of general interest in education．A full programme will shortly be issued．All meetings are to be held in the university building．

We have received the very interesting report pub－ lished by the Department of Mines of Nova Scotia on the Provincial Muscum and Scicnce Library of that province．The report deals principally with the collections of minerals and mineral products， and with the exhibition made in the Mines＇building during the last Dominion Exhibition at Halifax， where 226 separate exhibits were shown，including coal，gold，iron，copper，lead and mangancse ores， and many other minerals and mineral products．A full account is given of the finding of tin ore near Lake Ramsay，Lunenburg County，a most interest－ ing discovery，tending，when taken 1 ith other indi－ cations，to strengthen the hope that workable de－ posits of tin occur in the province．There has been a noteworthy addition to the collection of fish．A tarpon measuring over five feet in length was taken in Harrigan Cove，Halifax Co．This fish，so well known to sportsmen in Florida，has not been taken before，so far as is known，on our coasts．The science library has received a great many acces－ sions during the past year，and a completed card catalogue adds greatly to its usefulness．

The American Institute of Instruction will hold its seventy-seventh annual convention at Montreal, July 1st, 2nd, 3 rd and 4th. General sessions will be held in the morning, followed by department sessions, which will be addressed by special authorities on the different subjects, both English and Canadian. The Provincial Teachers' Association and other educational organizations will join with the institute in this convention. Excursions to Ottawa, Niagara, Quebec and other points have been arranged for.

A writer in the School World for April discusses the very large preponderance of women teachers over men in the United States under the heads of (a) the effect on the curriculum, and (b) the influence on the character of boys. He quotes from different writers on both points. It is stated that women take less interest in scientific subjects than men, and that "the steady decrease in the proportion of boys who are studying chemistry and physics is due, in large measure, to the meagre scientific equipment of women teachers." It is often said that boys will learn refinement and selfcontrol from women teachers, but this is said to have no support in facts. An editorial in the New York Churchman points out that the task of controlling and guiding the energetic impulses of the boy can only be accomplished by a teacher who has himself experienced them. The woman teacher, on the other hand, is in the boy's world an alien, and is respected for her good qualities without being recognized as a pattern to follow. The conclusion reached by the writer of the article is that the employment of an excess of women teachers has no reason but an economic one. Women can be had cheaper than men.

The Winnipeg Free Press contains full reports of the Manitoba Educational Association, which took place in Brandon, April 3rd, 4th and 5th. This association has grown out of the Provincial Teachers' Association, which, in changing not only its name but its constitution, has enlarged its scope, and aims at attracting all friends of educational progress. If we may judge from the list of speakcrs, and the interest of their specehes, this end has already been reached, for the addresses were not all by professionals, nor addressed to teachers alone. Among the topics discussed were: "Primary Education," "Municipal School Boards," Physical Training," and "The Aims of the High School." The burning question of "tcachers' salaries" came
up. One speaker said that so long as the teaching profession continued to be only a passage to other professions, so long would there be a rush of young men and women in and out of teaching; and so long as that condition remained the salaries would never be worth talking about. This condition will remain as long as it is easier, quicker and cheaper to qualify for the profession of teaching than for any other profession.

## Arbor Day.

Referring to a circular issued by the United States Department of Agriculture, the Outlook says:

The diversion of setting out a few trees and the exercises by which school hours are enlivened should be regarded as a means to an end rather than the end itself-an intelligent and lasting impression in the mind of the child. While isolated trees along the country roadside or in the city streets please the oye and cool the air with refreshing shade, the true message of Arbor Day is found in the forest, where wood is grown to supply material for houses, fuel, and industries, where the tree-protected soil is storing the waters for streams, to be used for quenching thirst, irrigating land, driving mills, or filling rivers deep so as to bear traffic. The forest is thus the producer and custodian of the necessaries of life. The science of forestry is based on the idea that exact knowledge makes it possible to co-operate with nature in bringing the forest to its fullest usefulness as a source of wood, as a protection to the soil, or as a natural reservoir. Arbor Day should be the occasion of imparting to children some simple forest laws; the planting of a few trees, without reference to the forest's productive value and commercial utilities, is certainly but a small part of the day's work. The normal child always loves the forest. Its mystery fascinates. It is the home of wild life. As every child is a natural investigator, the forest is an object of prime curiosity. But on Arbor Day the child needs to begin the study of forestry economics. As practical object-lessons those suggested in the circular of the Forest Service are valuable. For instance, what child has not seen a muddy freshet?-a sight common at this time of year. The stream is discolored by earth gathered from the soil, and rushes with force where there has been no forest cover. An experiment is suggested with fine and coarse soils stirred quickly into a turnbler of water and then allowed to settle, as explaining how a stream continues muddy while it runs swiftly and how it clears again as it slackens on more level stages, dropping the soil to the bottom. Again, flowers and seeds of trees are suggested as subjects of investigation. Many earlyflowering trees mature their seeds before the school year ends. It is interesting to note the adaptations by which the trees secure seed distribution; as, for instance, by winds, stream-currents, birds, animals. Hence, the world of flower and seed conveys nature's purpose to renew the forest and carry it undepleted from one generation to another. Finally, the circular contains practical suggestions as to planting. If every school-teacher should follow out the ideas as outlined by the Forest Service, the whole nation would be the gainer.

## Wllliam Henry Drummond.

It is with sincere sorrow that we record the loss that Canada has suffered in the death of Dr. Drummond. Many a greater poet has been less mourned by his readers than this interpreter of the simple lives of the French Canadian peasant and farmer, this singer of the woods and streams of our own land. If we look for the secret of his successful appeal to all hearts, we shall find it in a comment made by a recent American writer: "Dr. Drummond had a wonderful faculty of idealization. Nothing that was human seemed mean to him." His poems are never merely funny, full of spontaneots humor as they are. There is always an appreciation of what we can recognize as best and highest in human nature, in his sketches of men and women. In his introduction to "The Habitant," he disclaims the idea of writing the verses as examples of a dialect, or with any thought of ridicule. He says:
Having lived, practically, all my life side by side with the French Canadian people, I have grown to admire and love them, and I have felt that while many of the Englishspeaking public know perhaps as well as myself the French Canadian of the cities, yet they have had little opportunity of becoming acquainted with the habitant, therefore I have endeavoured to paint a few types, and in doing this, it has seenred to me that I could best attain the object in view by having my friends tell their own tales in their own way, as they would relate them to English-speaking auditors not conversant with the French tongue.

The Canadian poet, Louis Fréchette, says of Drtumnond: "That in using the French Canadian dialect he has made an audacious attempt, but with that success which boldness often wins, that he is true to life without ever falling into vulgarity, and piquant without bordering on the grotesque." Mr. Fréchette also transfers to his friend the title of " pathfinder of a new land of song given to the French Laurcate by the poet Longfellow."
Dr. Drummond made the following statements not long ago about his early life:

I was born in the West of Ircland, and came to the Province of Quebec at ten years of age, in the year 1864, when the lumbering interest was at its height. I lived in a typical mixed-up village-lBord à Plouffe-composed of French and English-speaking reftsmen or voyageurs-the class of men who went with Wolscley to the Red River and later accompaniex the same gencral up the Nile-men with rings in their cars, daredevils, Indians, half-breeds, Frencl-Canadians, Scotch and Irish-Canadians-a motley crew, but great river men, who ran the rapids, sang their quaint old songs-"In Roulant," "Par Derriçre chez ma Tante," and "l)ans la I'rison de Nantes;" songs forgotten in Ferance, but preserved in French-Canada. Running the rapids with these men 1 learned to love them and their
rough ways. As a boy I was always very fond of outdoor sport, fishing, shooting, etc., and have never "lost touch" with the class of men referred to. I wrote a lot of stuff in the way of verse, but never seriously, and much of it was lost.

Dr. Drummond was not, as we have seen, a Canadian by birth, but was born in County Leitrim in 1854, the son of an officer of the Royal Irish Constabulary. He was educated at the Montreal high school and at Bishop's College, Lennoxville. He graduated with honors in medicine in 1884, and began the practice of his profession. Of late years he has been devoting much of his time to business, and especially to the development of mines at Cobalt. His practice of reading his own verses in public made them much more widely and better known, and gave Canadians in different parts of the country an opportunity of meeting him. His best known poems are probably "The Wreck of the Julie Plante," " How Bateese Came Home," and " Johnny Courteau." He did not confine himself to dialect verse, though tunquestionably his finest work appears in that meditm.

## New Brunswick, I Love Thee.

New Brunswick, I love Thee, the land of my birth; To me Thou'rt the fairest, the dearest on carth. The charms of no other with Thee can compareSo lovely the landseape, so bracing the air. Liberty's banner wide o'er Thee is waving, No cold-hearted lord from the peasant is craving. The ploughman is lord of the fertile domain, And Peace and Prosperity o'er us do reign.

I love Thy green hills, and I love Thy green vallcys, Where beauty and pleasure the spirit inhales. Thy woodlands are gushing with music and song, And zephyrs are bearing the swect notes along. I love Thy long evenings, when round the old hearth The family assemble with friendship and mirth. Go search where you will through America wide, Nowhere do the moments so peacefully glide.
Nor tell me of lands that are richer in gold;
To many this story has often been toll,
And allured them away from their own happy home Among strangers to toil and forever to roun.
New lirunswick, my country, there's gold in Thy soil, lf only we for it would contentedly toil.
And pleasure and plenty shall crown all our days, And glad-hearted people shall sing to Thy praise.
[Sent by Miss Albina C. London, Upper Woodstock, N. B. (author unknown.)]

Your paper contains many valuable suggestions, and if I have made any success of teaching it is largely due to reading the EDucimonal Review.

Shediac Cape, N. IS.
H. S. P .

## Nature Study for May. Protection of Native Plants and Birds.

By G. U. Hay.

In the last number of the Review reference was made to the importance of forming among the pupils of our schools clubs for the protection of our birds and plants. In the neighborhood of large towns and cities many beautiful and interesting native plants have been almost exterminated by the practice of picking and exposing them for sale on the streets and on railway trains. Among these is the Mayflower, which has a charm for everybody on account of its delicate beauty and fragrance. In many cases its runners are pulled up bodily, the flowers picked off and the runners left to perish on the ground. This is a needless waste even where the Mayflower grows in profusion. It is a slow grower, very difficult, if not impossible, to cultivate. There is no necessity, in picking the flowers and a few leaves, to disturb the rumners which would thus grow on from year to year and yield fresh beauties to delight children and grown people for generations yet to come.

Nature produces her flowers in such profusion that they may be picked year after year without injuring the plants, if gathered without disturbing the roots or taking too many leaves. It is by their roots and leaves that plants are able to take raw materials from soil and air and make food for themselves in the sunlight. If roots are disturbed and too many leaves picked off, the plants either perish or become puny and sickly looking.

Great destruction is caused among evergreen trees by cutting them for decoration at Christmas in churches and houses; and of late years great quantities of fir and spruce trees have been exported from these provinces to the larger cities in the United States for Christmas decoration. It is only the most shapely trees that are taken, and this cutting out, if the demand for such trees increases, will seriously affect our young forest. This is especially true of the regions near our towns and cities where the ravages are seen, in the growing scarcity of shapely evergreens as well as of the laintiest of the wild flowers.
"Ny little girl so loves wild flowers that she can't resist the temptation to pick all she can find," said a fond mother to me nne day as we were walking among some rare wild flowers in a chosen spot. I said nothing, but thought that the " little girl" (abont ten years of age) wats depriving nthers who should visit the spot of secing these rare flowers and enjoying their bloom.

This is one instance of mere thoughtlessness on the part of those who gather the choicest of our wild flowers. They do not think that these, if left growing, would afford enjoyment to other passersby, and preserve for weeks the beauty of some chosen spot in nature.

Such flowers as the violets, dandelion, fawn lily (adler's tongue), trilliums, spring beauty, bluets, and others may be gathered in more or less abundance, especially such weeds as the dandelions, bluets and daisies, which are such favorites with children. But it is well that children and many grown people should know that it is considered an act of vandalism to pick too many of the rarer wild flowers which adorn the beautiful places in nature, wherever they are found, and which would add to the comfort and enjoyment of many other people as well as themselves. Take just a few and leave the others. They will look much prettier on their stalks than if picked and perhaps scattered along the roadside to wilt and die.

In Massachusetts, where the extermination of rarer wild flowers is more threatening than it is with u1s, societies are being formed for the protection of native plants. Leaflets may be obtained by addressing Miss Maria E. Carter, Society of Natural History, Boston, giving information as to the objects of such a socicty. In one of these icaflets Professor George Lincoln Goodale, of Harvard, says:
It is difficult for persons who are unacquainted with the facts to realize how rapidly certain species of plants and animals can be driven out even from favored localities. The alnost complete disappearance of our wild pigeon, which was formerly common throughout large districts in New England, shows that the balance of nature is easily disturbed. Many species of our most attractive plants are likewise threatened with at least local extinction, and these plants have not the forlorn resource of migrating on wing or foot to escape their enemy, man.
It secms very strange that the danger which threatens these charming plants, such as our Mayflower, two of our gentians, some of our orchids, and the like, should spring from the fact that they are charming beyond their companions. They form such wonderful masses of color when grouped together as cut flowers that it is hard to resist the impulse to make these masses as large as possible. But .....those who are true lovers of flowers will content themselves with a lighter draft on the fields and meadows.
In many parts of Great Britain and the continent, local associations have been formed to protect the wild flowers which are on the verge of extinction. In Switzerland the success of such combined action has been marked, and there are now very few malcontents. It is generally recognized that the appeal to protect the rarer flowers was based on sound judgment.
In New Prumswick, where thirty or forty years ago there were great flocks of wild pigeons, only a few scattered ones may now be seen. Dr. T. Orne

Green, in a recent paper read before the Natural History Society of New Brunswick, on the gamebirds of Miscou Island, N. B., records that all varieties of birds are much less numerous there than formerly, while some have alnost abandoned the ground. One cause of this is indiscriminate and injudicious gunning. He also states, on the authority of Mr. Chas. Wilson, that " eighty years or more ago wild geese bred upon the barrens, and it was the custom of the Micmac Indians to visit the island during the moulting season and destroy large numbers of them with clubs when they were unable to fly. After one such raid, more determined than usual, the geese as a body abandoned the island as a breeding ground." Other game-birds, and the beautiful snipe fomd along our shores, are threatened with extinction, owing to the indiscriminate slaughter of "pot-humters" and thoughtless sportsmen (?). These should be protected.

## Rise Above Children's Poems.

We are doing wonderfully well the work of interesting the children in stories and poems adapted to their life, but we do not follow this up, as we should, in such a way as to lead them to love adult poems and other writings. Transferring the child to manly interests and taste in reading, the most difficult of all achievements.

Unwillingly we cultivate arrested development in the literary taste of children, and the remedy for this is not easy. There must be a remedy, and it must be found, regardless of the difficulties in the way. It signifies little that children like poems for childhood. They must in some way be led to love literature for adu'ts when they become adults.

This can be done if they are led to choose for themselves from all the writings of an author. We send a child to a dictionary which has hundreds of thousands of words that he will not use. We no longer allow a student to use a "simplified" vocalsulary in the hack part of his Latin book, but make him go to the complete lexicon and select for himself the meaning of the word in this connection.

Providing a chitcl with a book of selections adapted to his grade, or providing him with specific selections, will never lead him to read anythng in after life that is not selected for him and served up to him. Let him look over the poems of Longfellow until he finds what he likes and appreciates, and then all through life he will do this and will select poems of his adult interest as he now selects those of child interest.

In all phases of school work we are inclined to serve cheap feed to the children. We are grading all initiative out of their life. Some radical reform is necessary. This is a good place to begin.

We heartily echo the main contention of this extract from The Journal of Education, but we think that the words that we have italicised suggest where the difficulty lies. No trunsference of taste and
interest ought to be necessary. Interest the child from the first in poems and stories that he will find interesting later on.

## See What Children Say.

How many teachers can matel these stories from their own experience?

## Whiskers.

The teacher of the Sunday-school class was telling the little boys about temptation, and showing how it sometimes came in the most attractive form. She used as an illustration the paw of a cat.
"Now," said she, " you have all seen the paw of a cat. It is as soft as velvet, isn't it?"
"Yesem," from the class.
"And you have seen the paw of a dog?"
" Yesem."
"Well, although the cat's paw seems like velvet, there is nevertheless concealed in it something that hurts. What is it?"

## No answer.

"The dog bites," said the teacher, " when he is in anger, but what does the eat do? "
" Scratches," said a boy.
"Correct," said the teacher, nodding her head approvingly. "Now, what has the cat got that the dog hasn't?"
"Whiskers!" said a boy on the back seat.—The Alliance.

Pounimeg Grammar into Him.
A certain little boy in a village school had fallen into the habit of saying 'I have wrote' and 'I have went.'

The teacher tried in several ways to break him of the habit, but all in vain. So one day she had him remain after school and write the two phrases one hundred times each, thinking that in that way he woukd surely remember to say 'I have written' and 'I have gone.'

A few minutes before he had finished his task the teacher was called out of the room. She told him to remain until she returned. When she returned she found on the desk the phrases correctly written one hondred times and beside then a note saying:
"Dear teacher-I have wrote "I have written" one bundred times and I have went home.'-Judge's Library.

I can see a steady improvement in your valuable paper. Loyalty to our own schools ought to demand that our teachers take the Revirew first.
-Subscriber.

## May Days.

## By Eleanor Robinson.

Victoria Day is our "May Day" in this part of the world, bringing with it not only thoughts of our Queen, of happy memory, but also the rejoicing at the return of spring, celebrated by a rush to the country of all town dwellers. The May day of literature, the first day of the month, is, in our climate, generally more reminiscent of winter than prophetic of summer. The trees are still bare, flowers are hardly to be found, often a snowbank lurks here and there in spots sheltered from the sum. We have to shut our eyes to our surroundings in order to enter into the spirit of the poets of lands where spring comes carlier, where they sing of "Sweet May, the month of flowers," "May that mother is of Moneths glad."

The celebration of the return of warmth, long days, and vegetation, on or about the first of May, is a very widespread custom. The Romans had games in honor of Flora, the goddess of flowers, beginning late in April and going on to the first few days of May. The northern Celts had rejoicings in honor of the return of the sun, which took the form of lighting fires on the hill tops, and singing and playing games about them. Among the English, we find the custom prevailing among people of all classes of going forth to the woods and fields, either on the night of the 3 oth of April or carly on May morning, and returning carrying boughs and flowers, with which they decorated their houses, especially the doors and windows. The earlier poets, especially Chaucer, are full of references to this " doing observance to May." In many places a May Queen was chosen from among the girls, usually one noted for beanty and goodness. This custom is commemorated in Tennyson's "May Queen," and in one of Maria Edgeworth's stories. The Maypole, round which dances and games took place, was a permanent erection in many English parishes. Onc of the London churches, St. Andrew, Undershaft, actually took this name from the fact that the llaypole raised in front of it overtopped the church steeple. A very famous Maypole was that which stood in the Strand, and was ${ }^{1} 34$ feet high. The Puritans opposed the May day customs, as they did all games and festivitics among the people. And no doubt abuses had crept in, and undesirable practices had become part of these celebrations. Many Maypoles were destroyed in Cromwell's time, but the Strand Maypole was taken down and kept in safety until the Restoration, in

1660, when it was put back in its place with great ceremony and rejoicing. In 1717 it was found to be decaying, so it was taken down and presented to Sir Isaac Newton.

Pope mentions it in the lines:
"Amidst that area wide they took their stand, Where the tall Maypolc once o'erlooked the Strand."
And a humorous poet of the eighteenth century writes:
"What's not devoured by Time's all-conquering hand? Where's Troy? And where the Maypole in the Strand?"
After the Restoration the May day festivities were revived, but they gradually fell into disuse among the better classes, and were celebrated only by village children, milk maids and chimney sweeps. In some places the children dressed a doll as May Queen, and carried her about in a sort of bower, singing songs and begging small contributions. This custom also prevailed in France.
In all the colder countries of Europe, May day games were usually more or less typical of the contest between winter and summer. In some parts of England they were comnected with Robin Hood and his band.
The 29th of May used to be called Oak Apple Day, and to be celebrated in memory of the Restoration of King Charles the Second, and of his escape by hiding in an oak tree. After the battle of Worcester, in September, 165 I, the King attempted to escape into Wales, but was forced to lie in hiding at Boscobel, in Shropshire, where he and one of his officers spent a whole day among the branches of an oak, whose thick leaves concealed them from the parliamentary troopers who were riding about in searcls of them. Tennyson, in "The Talking Oak," speaks of
"That remembered oak
Wherein the younger Charles abode Till all the paths were dim,
And far below the Roundhead rode, And hummed a surly hymu."

The 29th of May was the date of King Charles entrance into London in 1660 . It used to be observed in the church by one of the "state services," which were discontinued in 1859 . It was a common custom for men to wear gilded oak leaves or oak apples on that day. A writer in Blackiood's Magazine, writing as late as I857, says:
Never forget, if you wish your children and grandchildren to be dutiful and good, to keep the twenty-ninth oi May as a festival in your family, and never let them go abroad without a gilded oak-apple in their button-holes.

## Nature Study for Teachers in Vacation.

By J. Brittain

In the leafy month of June you must decide where you will spend the summer vacation. Many will go to the country, or remain there for a few weeks. But how to spend your time there is the more important question.

You will do some reading, but don't do too much, and let us hope that it will be well chosen. You will take pleasant drives, and enjoy the country air and scenery. You will take a friendly interest in the life and occupations of the country folk. But if you wish to make the most of your vacation, both of refreshment and vigor, physical and mental, you will try to get down close to nature in some of her forms or phases-see them without being shown, and interpret them without being told. Select one or two subjects of investigation, and follow these up closely, but not to the point of fatigue. You hear a bird singing in the trees near the house on several successive mornings. Study this bird. Get close enough to it to see its colors and their distribution. Find what it eats. Discover its mate and their nest. Observe the habits of the bird family till the young leave the nest and depart.

A neighboring pool will furnish interesting studies in plant or animal life. Many wonderful adaptations to a limited and special environment may be mada out. The inhabitants of the pool may be studied as a community, or a few species may be selected for thorough investigation.

A near-by wood offers an example of an organized plant society-the dominant trees, the bark flora, the undergrowth of herbs, shrubs and young trees, and the subterranean flora. The interdependence of these zones or ranks upon each other demands careful observation and thought. A typical collection should be made from each. A bog or a marsh may be studied in the same way. If you camnot identify some of the animals or plants, send accurate descriptions of them, or specimens, to your local Natural History Society, to the Geological Survey at Ottawa, or to Dr. Fletcher, of the Central Experimental Farms. In the case of a bird, a description will be quite sufficient.
One such study may be enough for one vacation. and if pursued in a rational and thorongh way must yield excellent results, both subjective and objective. The very fact of having a definite and immediate purpose for which to live and move is bracing and stimulating to body and mind. You will return to your school with a keener zest for attamment, and the research work you have done will make itself felt in your methods, especially in the mature lessons.

## Botany in Schools.

By John Waddell.
I have already contributed articles to the Educational Review on the study and the teaching of botany in our schools, I trust with some good results; but I feel that much further improvement is possible, and should be striven for.

Perhaps one oi the most notable features of the papers sent in by candidates in, the examinations of Grade IX in Nova Scotia is a lack of appreciation of what is required in the questions. An example showing this lack in an exaggerated degree was given in a reply to the request to describe any tree valuable for its wood inder the following heads: bark, style of branching, leaf, flower and fruit. It is evident that the character of the wood was not involved; but one candidate's entire answer was on that point, and the information was of a novel kind, especially in the sentence, "The cedar is sometimes used for coffins, as it will rot easy."
Pupils should be trained to get at the intention of a question, and then to answer in the best way. A child that grows up in the country should learn to distinguish different trees in his neighborhood, and he should be able to describe the differences. Any boy or girl in the Annapolis Valley ought to be able to distinguish an apple tree from a cherry tree, and should know the main characteristics of each. In parts of the country where pine and spruce and fir are found, pupils in the schools ought to be able to describe these trees.

The subject of botany is too wide for pupils to cover the whole ground. The questions asked in Grade IX would constitute a different paper, provided the whole were to be answered; but there is always such a choice given, that the pupil having done reasonable work would find several questions that he should be able to answer quite enough to give him a high mark. Thus teachers are given considerable latitude, and if they are specially interested in any particular department of the subject, they may interest the pupils in that department. For the most part, flowering plants are taken up in the schools; but if a teacher is specially interested in non-flowering plants, he can devote himself largely to them. But it is required that the knowledge should be definite. If ferns are studied something more definite than that they are small plants with green branching fronds and no flowers is to be expected. The peetuliarities of wool tissue, the mode of unfolding of leaves, the arrangement of spore eases, the method of reproduction, and other characteristics distinctive of ferns should be
thoroughly understood. It is not likely that ferns will be studied except in places where there are varieties of ferns, and the differences should be familiar to the pupils. What has been said about ferns applies, to a certain extent, to mosses, lichens and fungi. What peculiarities has the mushroom that put it into the class of fungi?

It is hardly safe to depend entire.'y upon the nonflowering plants, though last July there were two questions upon them and fair answers to these, together with a reasonable reply to one of the three questions on physics, would ensure the minimum marks required of teachers, and might even reach full pass marks. Something should, however, be learned about the flowering plants, the general structure or the different tissues, or some of the important individual plants.

I think, and I belicve it is the opinion held in the education department in Nova Scotia, that for the grade in which botany is the science required, observation of common plants, with a careful examination of the similarities and differences, is of the greatest value; but if it were found that some teachers took a special interest in physiological botany, and were able to interest the pupils in that part of the subject, in how the root grows and penetrates the soil, how sap flows, how the food is absorbed from soil and air, and how it is changed into the material of the plant, I feel sure that such teachers would receive encouragement by questions of that nature on the examination paper. What is wanted is that a fairly reasonable ground should be covered, and covered systematically. In order that teachers should learn how vague the knowledge of pupils frequently is, I know of no better way than to test them on some of the questions of the last few ycars. I should suggest that the class be given any of the recent papers, and each of the pupils asked to answer in writing in quarter of an hour the one question he can answer best. Let the answers all be examined by the teacher. Afterwards let each of the class answer the same question as before, but this time using a.l sources of information available ; if in the case of describing a plant, it will be best of all to have the plant before him, but let him use books as well. This might be a home exercise. Then the several duestions should be gone over by the teacher in class, errors being pointed out and omissions noted. By this time there should be several efuestions that the pupils would know pretty well. Then other questions
might be taken up in a similar manner. If the papers of the last half dozen years were gone over in this way, using them as a test, and for the purpose of training in thought and expression, I am sure that the papers handed in at the provincial examination would show a marked improvement.

Don't try to cover the paper. Leave out the questions that are off the line of the work in the class. For instance, in a school where flowering plants are studied, leave out questions on flowerless plants. Where definite plants are described, see that distinctive characteristics are given.

If any reader imagines that I am providing an easy mode of passing examinations by cramming up answers to former examination papers, I may say that my object is quite otherwise; and in examining the answers I should try, as far as possible, to prevent such tactics being successful. But it is well for the teacher to test his scholars along the lines on which he will be tested at the provincial examination, and old examination papers may be made educative. The thing the education department aims at, is that the subject should be properly studied, and that the pupil who studies properly should obtain a good standing. Any pupil who conscientiously went over the last half dozen examination papers, and tried to learn as much from them as possible, and who received the help of even a moderately helpful teacher, would, I venture to say, have a better knowledge of botany than ninetenths of the candidates now have; and I should hope that at the provincial examinations he would reap his reward. Only let him not try to guess at what he will be asked at the next examination, and strive to learn the smallest amount that will give a pass. In that case, I trust that he also will reap his just reward.

Three of the interests which are strongest during a child's early years at school are the interest in spoken language, the interest in finding out things. and the interest in making things, or construction. If this be so, then we should, during a child's early years at school, devote more time to narrating to him the history of his country and tales of adventure, and to getting him to repeat them in his own words. We shonld, in every possible way, give the clitd a knowledge of the world lying round about him; and there should be suitable manual occupations at every stage of the elementary school.Alex. Morgan, D. Sc., Edinburgh.

## Geometrical Drawing. - V.

By Princtpal F. G. Matthew, Truro, N. S.
As stated in the December Review, the series of exercises in Practical Geometry was prepared for the last four grades of the common school. At the request of several teachers, who expressed a wish to carry such work into the first year of the high school, so as to form a direct connection with the study of theoretical geometry, the exereises given herewith were prepared. They are only samples of many such, and deal with proportion, areas and the ellipse.

Fig. I. To find the fourth proportional to three given lines.-Let $\mathrm{A}, \mathrm{B}$ and C be the given lines. Draw two lines OMI and OQ, making any acute angle. Set off on them $O N$ equal to $A$, OP equal to B , and NR equal to C . Join PN. Through R draw RS parallel to P'N. Then P'S is the fourth proportional ; $A: \mathrm{B}:: \mathrm{C}: \mathrm{PS}$.

Fig. 2. To find the third proportional to tiso given lines.-Draw O.D and $O$ Os before. Set off OP equal to $A$, and $O N$ and $O Q$ equal to $B$. Join PN, and draw QM parailel to IN. Then OM is the third proportional ; or $\mathrm{A}: \mathrm{B}:: \mathrm{B}: \mathrm{OM}$.

Fig 3. To find the mean proportional betacen tw'o given lines.-Let AB and C be the given lines. Produce $A B$ ' to $D$, making $13 D$ equal to $C$. Bisect $A D$ in $O$. With centre $O$, draw the semicircle $A E D$. At $B$ erect perpendicular BE. "Then BE is the mean proportional; or Ali: BE : : liE : C.

Fig. 4. To divide a gizen line into e.strome and mean ratio.-Let $A B$ be the given line. At $B$ erect perpendicular $B C$ equal to half $A 1$. Join $A C$. With centre C and radius Cli, draw are BD . With centre $A$ and radius $A D$, draw arc $D E$. Then $\mathrm{AB}: \mathrm{AE}: \therefore \mathrm{AE}: \mathrm{E} B$.

Fig. 5. To diaide a line proportionately to a given dizided linc.-Draw the two lines parallel in one another, as $A 1$; and Cl ). Join the ends and produce these lines to meet in E . Join E with each division of the divided line EI, E2, etc. These lines crossing Al; divide it proportionately or similarly to CD .

Fig. 6. To construct an isosceles triangle in athich the angles at the base shall be double the vertical angle.-Given one of the sides AB. Divide AB into extreme and mean ratio at E. With ls as centre and radirs PA, describe arc AF. With A as centre and ratlius AE, describe are EF. Join AF and BF . AlBl is the triangle required.

This amd the following exercise are excellent
examples of the use of dividing a line medially. (Fig. 4).

Fig. 7. The same as Fig. 6. -Given the base AB. Bisect the base $A B$ in $C$. Erect perpendicular $C D$ equal to AB . Join BD and produce to E , making DE equal to half the base. With $B$ as centre and radius BE , draw arc EF cutting CD produced in F . Join FA, FB. Then FAB is the triangle required.

This problem will be recognized as that employed in the construction of the pentagon. (Fig 20, Gr. VII).

Fig. 8. To reduce a gizen triangle to another triangle of given treight, but equal area.-Let ABC be the given triangle, and D the given height. Draw EF parallel to $A C$ at a distance from it equal to $D$. Produce CB to G . Join GA. Through B draw BH parallel to GA. Join GH. Then GHC is the triangle required.

Fig. 9. To construct a rectangle equal in area to a given trianglc.-Let ABC be the given triangle. Draw perpendicular BD. Bisect BD in E. Through E draw FG parallel to AC meeting perpendiculars from $A$ and $C$. Then $A F G C$ is the rectangle required.

Fig. 10. To construct a square that shall be cqual to the sum of tero squares.-Let AB and C be the sides of the two given squares. At A draw AD equal to $C$ and at right angles to AB. Join BD. Then 13D is the side of the square required.

Fig. 11. To construct a square that shall be equal to the difference of tivo squares.-Let AB and $C$ be the sides of the given squares. Bisect $A B$ in O. From centre $O$ draw semicircle ADP. From A as centre and radius equal to C , draw are cutting at D. Join DB. Then D)l; is the side of the square required.

Fig. 12. To construct a square cqual in area to a gizen rectangle.-Let ABCD be the rectangle. Prodince Al to E , making BE equal to BC . On AE describe a semicircle. Produce liC to cut the semicircle in F . Then J31 is one side of the required square.

PıG. 13. On a siren line to construct a rectangle equal to a given rectansle... Let AB be the given line and $\triangle \mathrm{CDE}$ the given rectangle. Join ISE. Through C draw CF parallel to BE. Through F draw FG parallel to AB, meeting a perpendicular from B. Then ABGF is the rectangle required.

Fig. 14. To biscet a triangle by a line drax̃'n parallel to the base.-Let ABC be the triangle. Bisect $A B$ in $O$. On $A B$ draw a semicircle $A D B$.

GEOMETRICAL DRAWING. $\dot{V}$

| $F_{1 g} .1 .$ | Fig. 2. | $F_{1 g} 3 .$ | Fig. 4 : |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Fig. 9 |  | Fig 11 . | Fig. 12 . |
| Fig 13. | Fig 14. | Fig is | Fis 16. |
| Fig 1 | Fig 18 . | $\text { Fig. } 10$ | Fig 20. |

From O draw OD perpendicular to AB . With B as centre and BD as radius, draw the are DE . Through E draw EF parallel to the base. The line EF bisects the triangle.

Fig. 15. The Ellipse.-Explanation of terms. ACBD is called the curve of the ellipse. O is its centre. Any line passing trhough $O$ terminated at both ends by the curve is a diameter. AB and CD bisect each other in O , and are perpendicular to each other. They are the longest and shortest diameters, and are called the axes. AB is the major axis or transverse diameter, and CD is the minor axis, or conjugate diameter. If the distance AO be taken as radius, and from C or D as centres, ares cutting AB in $\mathrm{F}_{1}$ and $\mathrm{F}_{2}$ be drawn, either of these points is called a focus of the ellipse.

A line like EG at right angles to the transverse, but not passing throngh the centre, is called an ordinatc. EH is a double ordinate.

The points $A$ and $B$ are called the vertices. The distance of the centre from the focus, as $\mathrm{OF}_{1}$, or $\mathrm{OF}_{2}$, is the eccentricity of the ellipse.

The most important property of the ellipse is that if any point K be taken in the curve, the sum of $\mathrm{KF}_{1}$ and KF 2 is equal to AB the transverse diameter.

Fig. I6. Given the lengths of the axes to draxe the ellipse.-String and pin method. Draw AB and CD the given lengths, bisecting each other and mutually perpendicular. With D as centre and AO as radius, mark the foci $F_{1}$ and $F_{2}$. Drive a pin into each of the three points, C, FI and F2. Tie a string tightly round the three. Remove the pin at C and insert in its place a pointed pencil. By carrying the pencil round, keeping the thread tight, the point will strike an ellipse throngh the points A, B. C and D .

Fig. 17. The same as Fig. 16.-Trammel methorl. Draw the axes as before. Take a piece of paper with a straight elge and on it mark EF equal to $C O$, and EG equal to $\Lambda O$. Place the strip as in the figure so that $F$ is on the major axis and $G$ on the minor. E will then be on the rurve. By moving the strip round, always keeping $F$ and $G$ on the major and minor axis respectively, any number of points in the curve may be found. Sketch the curve freeland through these points.

Fig. 18. The same as Fig. 16.-Method of intersecting ares. Draw the axes and mark the fnei. Take any number of points between O and FI or F 2 . and mumber them as in the figure. They should be chose together noar the focus and spaced wider near
the centre. Take the distance AI, and with centres $F_{1}$ and $F_{2}$ describe ares at $a, a, a, a$. With dis tance BI and the same centres cut the other arcs. Take the distance $A_{2}$ and $B_{2}$ and form the focal points, make arcs intersecting at $b, b, b, b$. Similarly with distances $\mathrm{A}_{3}$ and $\mathrm{B}_{3}$ make ares at $c, c, c, c$, and so on with the rest of the points. Sketch the curve through the intersecting arcs.
Fig. 19. The same as Fig. 16.-Method of intersecting lines. Draw the axes as before. Through ABC and D draw lines parallel to the axes, to form the rectangle $\mathrm{E}, \mathrm{F}, \mathrm{G}, \mathrm{H}$. Divide AO and AE into the same number of equal parts. From C draw lines to the divisions on AE. From D draw lines through the divisions in AO until they meet the former lines, Di meeting $\mathrm{C}_{1}, \mathrm{D}_{2}$ meeting Cc , and so on. Through these points of intersection draw the curve CA, which will be one-fourth of the ellipse. Treat the other quarters in the same manner to complete the ellipse.

Fig. 20. Given the ellipse to find the centre and ares.-Draw any two parallel chords PQ and RS. Bisect these in T and U . Through TU draw the diameter VX and bisect it in O . This is the centre. From $O$ with any radius to cut the curve draw a circle EFGH. By joining these points a rectangle will be formed whose sides are parallel to the axes. Through O draw AB parallel to FG and CD parallel to $\mathrm{EF} . \mathrm{AB}$ and CD are the axes.

The softly warbled song Comes from the pleasant woods, and colored wings Glance quick in the bright sun, that moves along The forest openings. -H. W. Longfellow.

> Under the hedge by the brawling hrook I heard the woodpecker's tap, And the drunken trills of the blaekbitds shook The sassafras leaves in my lap. -Alice Cary.
> The wild things of the wood come out, And stir or hide, as wild things will, Like thoughts that may not be pursued, But come if one is calm and still.
-Edzoard R. Sil!
All things are new-the buds, the leaves,
That gild the elm-trees modding crest, And even the nest beneath the cavesThere are no birds in last year's nest!

> -Henry W. Longfcllore

We sit in the warm shade and feel right well How the sap creeps up and the blossoms swell; We may shut our eyes, but we cannot help knowing That skies are clear and grass is growing.
-James Russell Lozsell

# Self-Activity the Developing Force of Frœbel's System. 

Mrs. C. M. Condon.

Froebel has not only shown us that the recognition and application of this law of unity to education is a necessary condition of success, but he has also set in a very clear light the fact that the child, in conformity with its provisions, carries within himself the means of securing lis own development. These are the natural instincts common to every child, and they reveal themselves, more or less satisfactorily, through his own self-activity.

But these instincts are, at first, blind, and often erring, therefore they need guidance, careful fostering, without undue interference. Nor must the physical instincts be alone guided, with the sole aim of first making " a good animal;" but we must take to heart the fact that the mental, moral and spiritual instincts of the child are just as implicit in his nature, and however dim and uncertain they may appear, they must receive attention, and be gently drawn out, and, by exercise, gain the strength necessary to raise them from blind, unreasoning instincts to conscious intelligence, to spontaneity, and to increasingly happy and fruitful action.

If this achievement by the child were an impossibility, he would be a startling exception to the law of unity, for every other form of life, vegetable and animal, can only be successfully reared by adapting our methods to the natural tendencies of the plant or animal which we are attempting to bring to perfection. Even crystals show their inherent qualities (inward nature) by their arrangement of planes and angles to a predestined form.

If, then, this universal fact of inward development, by outward manifestation, be true of that part of the creation which bears the stamp of necessity, what reason have we to doubt that the same condition holds good in the child, who bears within himself forces, greater in number, power, diversity and aim? But the helplessness of the child blinds all eyes, but those of love and wise experience, to the forces that lie dormant, waiting for the impulse of his own self-activity, which must be gently led into the right path, until it acts intelligently and habitually with increasing foresight as to results. Repeated acts thus form right habits which crystalize into good conduct, and thus produce a noble character.

The stress laid by Frobel upon the right training of the child, from the very earliest pcriod, ought to
seriously engage the attention of our teachers, because it was the matured judgment of a man who was gifted with marvellous powers of analysis, and who had closely and critically studied all the processes of education, beginning with schools, and proceeding to a survey of university methods, and then, going backward, through every preceding grade, in order to find out the weak spot in organized education, of which he was so painfully aware.

His was not a mere outside amateur view, but that of a teacher with a practical experience, who had taught in schools, and as a private tutor, who had been three years with Pestalozzi, then the cynosure of the educational world, and who in his own schools, where he had a free hand, so that he could rectify errors and supply deficiencies. But there was one obstacle that he saw must be removed, if human education was to justify itself in its products, not here and there only, but to prove itself a factor in the elevation of the whole mass of humanity. The kindergarten was his supreme effort to remove the obstacle that stood in the way of progress, by taking the child at a period, when he was usually left without regular training, being simply allowed to drift aimlessly until such time as the school received him to tax the patience and ingenuity of the teacher. This obstacle-neglect of early training-can never be entirely removed until mothers are thoroughly trained to the intelligent performance of their duty, at once so difficult and delightful. But the kindergarten bridges the chasm between home and school, and proves itself, at the same time, a corrective of many faults caused by neglect at home, and a most efficient preparation for the school. The truth of this statement will be confirmed by those teachers who have ever had the good fortune to receive their pupils from a wellconducted kindergarten.

The kindergarten develops the child's inner nature through and by the most varied methods of expression, in speech, gesture, song, circle games, gymnastics, most carefully arranged to exercise, but not to overtask the child's strength and interest.

The ceaseless activity of childhood is not allowed to run to waste, nor to display itself in mischief and destructiveness; but while the individuality of the child is most sacredly preserved, conditions are skilfully prepared and suitable material provided on which the little one can expend his exuberant vitality, in building with blocks. from which, incidentally, he is absorbing notions of form, size,
number, position, direction, and other qualities of matter which he is led to see and feel for himself. In this way he is led to observe, compare, see the truth of things ; and since truth is always beautiful to the unspoiled nature, he learns to love it and to express it in accurate speech and little works of skill; for nothing gives us a more vivid apprehension of correctness in detail (truth) than the fixing of a mental image in a visible form in some product of handwork.

Then Froebel combines physical training and a sympathetic outlook by his dramatic games, in which the child is helped to represent the various activities of nature and man's work; thus by play, and in it, he learns to estimate the value and dignity of labor; to gain a sense of human society as one great whole, in which each must do his part, and he.p his fellows.
" From every point in nature," says Froebel, " a pathway leads to God." This decp conviction led him to bring the child into close and loving relations with nature, by showing him her beanty, by giving the little ones each his own garden plot, and teaching him experimentally to care for plants and pet animals, thus leading him to see not only just how much the could do, but how much more he must patiently leave to the great Creator and Preserver of all things. Reverence and obedience to law must be the natural outcome of such a training.

The thoughtless may sncer at what they may consider "mere trifling play," but the shrewd observer who will spend even one session in a genume kindergarten will descern in even the simplest play the nascent begiunings of all human culture; and he may well ask why the free, happy-earned spirit of the kindergarten should be so foreign to the school, where an air of constraint, even a spirit of antagonism, is often painfully apparent. As the same human nature is to be dealt with in both institutions, one may reasonably enquire why principles and methods which have worked so well in the kindergarten shoukd be discarded in the school? If there ought to be no sharp divisions in the life of the individual, no chasms to be bridged in the course of training and instruction, as we all admit theoretically, but that each period should be connected with the preceding stage of culture, and be naturally joined to that which succeeds, if this theory be true, and it is, why should we persist in a course that gives results so disproportionate to the expenditure of money, time and scrvice?

## Morning Talks for May.

Underlying thought-Happy days.
Name of the new month?
How many days has May?
To what season does May belong?
Name the other spring months.
What did March bring?
What did April bring?
What does May bring?
What season comes after spring?
How many summer months?
Name them.
What garden flowers blossom in May?
What wild flowers blossom in May?
Name the color of each.
How do the fields look?
What birts do we see?
What are they doing?
How can we help them?
What do the birds do for us?
Do we like to see the birds?
Are we glad when they come back?
Where do birds build their nests?
Do all birds build their nests in trees?
Where does the robin build its nest? The bluebircl? the swallow? the meadow lark? the wootpecker?

What trees blossom in May?
Are they in full bloom?
Are any in full leaf?
Any bare?
What is the color of the apple blossoms? cherry blossoms? pea blossons? peach bussoms?

How many petals has each?
What is meant by "Arbor Day?"
What is done on Arbor Day?
Name some large trees.
Name some small trees.
Of what use are the trees to man, to animals?
What tree do you like best?
Foems: "It Is Not Ahways May," Henry W. Longfellow; "There Is lut One May in the Year," Christina Rossetti.-Sclected.

There was never mystery
But tis figured in the flowers;
Was never sceret history But birds tell it in the bowers.
-Ralph Waldo Emicrson

## Van Dyck.

Miss A. MacLean.
Anthony Van Dyck was born at Antwerp in 1599. In the Flemish school he is surpassed by Rubens only. At fifteen years of age he entered the studio of Rubens, and at nineteen he was admitted to the Painters' Guild of Antwerp - the youngest artist ever admitted.

Following Rubens, he first turned his attention to ideal and sublime subjects. But though these showed great precocity, he was not great in composition and icleality as was Rubens. But when he later painted portraits, and especially single figures, he eclipsed Rubens, and many of his portraits are among the world's masterpieces.

In 1621 he visited Genoa, Rome, Florence, Venice, Turin and Palermo, and the letters of introduction he bore from Rubens opened all doors to him. His beauty, elegance, superior education and superb gifts made him welcome cverywhere, and the best the world had to give was frecly laid at his feet. At Venice he was so impressed by Titian and Tintoretto that for a time he seemed to lose the influence of Rubens. Returning to Genoa, where be was accorded a glad welcome by the patrician families of that city, he painted the fifty portraits still to be seen in the galleries there; portraits which alone would have made his name immortal liad he painted 110 others. In 1625 he returned to Antwerp, and during the next six years he painted in his own country some of his most important works. In 1632 lic went to England. Fortune smiled on him there as ever; King Charles I at once granted him permission to paint himself and family, and these works crowned his reputation. He was appointed court painter, knighted, given a yearly pension, apartments at Blackfriars, and a summer residence at Eltham was placed at his disposal. Accustomed to the elegant surroundings of Rubens, and having lived in the palaces of his patrons in Italy, he now lived in such splendor that his apartments became the resort of royalty, aristocracy, and the gifted of the land. The King and Queen employed him constantly, and about thirty-cight portraits of the former and thirty-five of the latter exist. The equestrian portrait of the King at Windsor and in the National Gallery, London, those of the Qucen at the galleries of Windsor, St. Petersburg, Dresden, etc., and the groups of the royal children at Turin, Windsor, Berlin, etc., are unsurpassed.

With the exeption of a short period in Brussels, Van Dyek and his pupils worked seven years in England. Sle painted portraits of all the principal
personages of the court of Whitehall. He followed Rubens' plan of having his pupils and skilled employees help him in his paintings. There are over 350 of his works in private galleries of Great Britain, and no other country can show as fine a collection of his paintings as England.

Rubens never made a specialty of portraiture, and is said to have suggested that field to Van Dyck. Rubens would not give enough attention to an individual sitter to enable him to see beneath the surface and paint a characteristic portrait. Van Dyck studied his sitters, saw the likeness, and made characteristic portraits. As compared with Rubens, he made the figures less stout, indicated fewer bones and muscles, and gave them less blood. He was never brutal, never gross, restrained, polished; he seems to have given to all the people who sat for him something of the graces of his own person; a noble air, a finer style in garments, and hands more regularly white and handsome. He had a taste for draperies well put on, silky stuffs, ribbons, jewels, plumes and ornamental swords. His handling was rapid and easy, after the manner of Rubens. He engendered a school, the English school-Reynolds, Lawrence, Gainsborough, and almost all the genre and landscape painters.

Percy Ranclell Head says of Van Dyck's portraits: " His portraits of men are, as a rule, more successful than those of women ; lie evidently shared the deficient sense of the best characteristics of . woman's beauty which marks Rubens and all his school."

Jules Guiffrey says of Van Dyck's portraits:
"Seldom or never is there any action. Do not seek in these impassive faces for any expression of joy or gricf. All are shown preserving that caln, that imperturable screnity characteristic of the true Fleming."

Distinction seems to have been the ideal quality he sought; the quality which formed his individuality. No matter from what class his sitters came, they all were endowed by him with a distinguished moin. He never painted even his most intimate friends in the familiar unconstraint of daily life. All posed for their portraits. Van Dyck's order of precedence int the procession of great artists has never been accurately determined. He lacked creative genius, inventive instinet, that which constitutes a powerful individuality. In Rubens' studio he followed Rubens. In Italy he followed the Italians. On his return to Antwerp he combined in his works the best of all he liad seen and learned. In England, more especially in his first years there, he reached a sureness, a power of execution which
makes many of his portraits of Charles I and family class among the most finished works of art.

There is an illustrative story told of a visit paid by Van Dyck to Frans Hals at Haarlem. As Van Dyck admired Frans Hals' portraits, he had made repeated calls on him, but Frans Hals was rarely to be found except at a tavern. However, on leaving word that a stranger wished to have his portrait painted, Hals arranged to meet himi. When they met, Van Dyck said he wished a portrait of himself, and that it must be painted in two hours. Hals agreed, and painted the portrait in the given time. Van Dyck approved of it, and remarked that painting portraits seemed a very simple task, and said he would like to paint Hals' picture. Hals soon perceived that he had before him no ordinary painter. When he beheld the finished picture, he embraced Van Dyck, crying, "You are Van Dyck, nobody else could do as you have just done!"

And now, what shall we say of the mau, Van Dyck? Or is it only of the artist we should speak? Well, let Fromentin say what he thought of the man, Van Dyck.
"It is thus I should imagine a portrait of Van Dyck, made, as it were, by a rapil sketeh with a broad pencil: A young prince of royal grace, with everything in his favor-beanty, elegance, magnificent gifts, precocious genius, a rare edncation-and owing all these things to the advantages of birth: cherished by his master, himself a master among his fellow-students, everywhere distinguished, everywhëre sought for, feted everywhere, in foreign parts even more than at home, the favorite and friend of kings, entering thus by right into the most enviable things of the world, such as talent, renown, honors, luxury, passions and adventures; ever young at a ripe age, never staid even in his last diys, a libertine. a gamester, eager, prodigal, dissipated. . . . . . a man who abused everything, his seductions, his health, his dignity, his talent, '. . a a seeker of adventures, who at the end of his carcer married to order, as it were, a charming, well-horn maiden, when he could no longer give her either strength, or much money, or great charm, or a secure life: a wreck of a man who, wh to his last hour, hat the good fortune, the most extraordinary of all, to preserve his greatness when painting: a man who was forgiven everything on account of one supreme sift, one of the forms of genius-grace; to sum up all, a Prince of Wales dying wron his accession to the throne, who was by no means fitted to reign."

Though only forty-two years of age, he dicd, wh in many experiences, in 1641.

## In Canada.

"In fair and growing Canada, that happy Dominion in which it is now my delightful privilege to live," were the words in which Earl Grey, the Governor-General, made reference to this country in his speech at the recent peace conference at New York. He proceeded to mention the law recently enacted by the Canadian parliament making it an offence for the forces of labor and capital to resort to a lockout or a strike without first having an investigation into the subject of dispute; and expressed the hope that the coming Hague Conference may not be prorogued until it has established rules which will apply to the conduct of international disputes the same principle which has been adopted in Canada to avert industrial war.

It is well for us to realize at times that Canada is indeed a happy land as compared with others, and that our free self-goverument under the British Crown has enabled us, in some respects, at least, to make laws for the safety and welfare of our people which are worthy of imitation.

Comparing our laws and political institutions with those of our nearest neighbors on this contineut, as is most matural for us to do, we need not deny to them the right to believe that their own are best. It is sufficient if we think that ours are better for us, and are bringing us better results.

When the United States was separated from British North America, in 1783 , more or less confusion and disorder prevailed unti] the adoption of a written constitution as a bond of union. North of the new boundary line, where loyalty to the Britislı Empire was the leading political principle. the only bond of union was the Crown, until, two generations later, the Dominion of Canada was formed. Incvitably, in developing their political institutions, the British Provinces followed Irritish precedent; and quite as inevitably the independent states endeavored not to do so. Hence it came about that when the confederation of the provinces took place, the principle of responsible govermment had long been firmly establiched with us, while it has not yet been adopted in the United States. In Canada, the people rule, and the government of the day is quickly changed in response to their will. The president of Canada, or prime minister, when called to office by the governor-general, must go to the electors and be by them returned to parliament as a necessary condition of his holding office. Faiting in that, he must immediately retire. All the members of his cabinet must in the same way obtain
a seat in parliament after their appointment to office. And this president and his advisors hold office only so long as they can command the support of parliament in every measure they propose. The President of the United States may recommend to congress a certain measure, the congress does as it pleases about the matter, and he still remains president. His secretaries may have opinions, and express them when and where they will, without any effect upon legislation. When the Canadian cabinet presents a bill to parliament for some desired legislation, if the bill fails to pass, the defeated government resigns without delay, and a new prime minister and cabinet are chosen; or parlianent is dissolved, if the government believes that the sitting members do not fairly represent the will of the people, and a new general election follows. The newly elected parliament, or newly elected government, as the case may be, enters at once upon its work. The United States plan of allowing representatives to keep their seats in the halls of legislature for a time after they have been defeated at the polls, or after their successors have been chosen, does not commend itself to Canadians; who look upon it as a restriction of popular government. Still more are they averse to the plan of continuing an administration in power after its policy has ceased to be the policy of the legislature.

Above the leader of the government, or head of the ruling party, there is in Canada the King, or his representative, the Governor-General, who is of no party, and represents the people as a whole. Of course there is nothing corresponding to this in the United States; but Canadians think that it makes for stability and good government, and helps to separate the ideas of law and order from those of party policy and political strife.

Judges and all civil servants represent the Crown, and not the party in power; therefore they hold office during good behavior, and not during the term of the administration, as in the neighboring republic.

Lynch law and mob violence are practically unknown in Canada, even in the mining regions. Laws are more swift and sure in their operation. and therefore life and property are safer than they are in the United States-or, at least, Canadians think so.

Our marriage laws are less elastic than those of the United States.

Military authority overrides civil law in the United States. In Canada, no officer in charge of troops could order his men to fire upon a mob, on penalty of a charge of murder, if anyone were killed
by the firing party, unless a peace officer had first: called upon the nob to disperse. Unless the whole region has been declared under martial law, the civil law is supreme. In the United States, troops on duty in a disturbed district may shoot whoever opposes them, and no one questions their right to do so.

In Canada, mines and minerals are always more or less under government control, and are worked by lease from the Crown. No one, therefore, can hold such property for more than a limited time and refuse to work it.

These are some of the points in which we like to believe our laws are better than those of our neighbors. Our banking laws and our treatment of the Indians are admittedly better, and there are many others in which we think that we have the advantage.

## Wireless Message on Atlantic Coast Received in Callfornia.

On Sunday, March so, A. J. Millison, the operator at the wineless telegrapling station on Point Loma, in southern California, observed his apparatus intercepting a message. On investigation he asertained that a message was being sent from Washington, D. C., to Pensacola, Fla. He adjusted his instruments, which are the most delicate used by the United States government, and caught the whole message. At about the same time part of a message to the battleship "Connecticut" from Washington was clearly on the instruments at Point Loma.

Highly gratified, the operator sent messages to the Atlantic coast, and received answers from the operators at Washington and Pensacola. Later he wrote out copies of the messages that he intercepted on the Atlantic coast and sent them, with letters, to the operators there.

The distance from Pensacola to San Diego in an air line is about $\mathrm{r}, 800$ miles, and from Washington to San Diego is about 2.400 miles. The matter has been reported to Commander H. C. Gearing, Chief of the Equipment Department at Mare Island navy yand, California. The messages sent by the operator at Point Loma to Washington were only faintly recorded on the instruments, but the messages between Washington and Florida and part of a message from Washington to the battleship "Connecticut," 600 miles out in the Atlantic Ocean, were recorded clearly. The new appartus is partly the invention of Mr. Millison, and has been installed in the Point Loma station only few months. Some time ago the Point Loma operator succeeded in communicating with Tacoma, Wash.Scientific American.

> Such a starved bank
> Till that May morn; Blue ran the light acrossViolets were born.-Brozening

Gold cups o'er filling on a thousand hills A calling honcy-bee.-Helen Hunt Jackson.

## British Empire Statistics.

By London Board of Trade.

The Board of Trade does its best, with limited resources and with little encouragement, to perform some of the work which ought to be done regularly, by a well-equipped census dejartment, permanently established to be the eyes and ears of the government. Amongst its latest efforts is the excellent " Statistical Abstract of the British Empire," which has now reached its third annual issue. This valuable pullication is the first attempt which has been made to give a statistical account of the lbritish empire as a whole. It bristles with facts.

The volume opens with figures for area and population. It is fairly well known that the British empire has about $400,000,000$ peop.e in its $11,000,000$ square miles. It is not so well known, and the Abstract does not tell us, that the total white population of the Britisl empire is only about $56,000,000$, or less than the population of Germany: The Abstract tells us nothnig also of the races within the empire, but it ought to do so, for the questions involved are of tremendons importance, and those who rule an empire do well to remind themselves of the facts.

We are given, however, talles relating to the empire's chief cities, and there is no more extraordinary fact in the whole book than that albont one-third of Australia's small population is crowded into four towns:


Thus ontside of these four urban areas the enormous continent of Australia contains but $2.714 .-$ ooo people in its habitable fringe. Other great empire cities are Montreal with abont 290.000 people, Toronto with about 220,000 people. Capetown with 556,000 people. These, with Hong Kong and Singapore, are the cnly towns which rank with the great urban congregations of the home country. The reader may be reminded that Iondon Comncil had in 1905 4.721,000 people, while Liverpool had 739,000 , and Glasgow 83 r,000 people.

An Emifrés Trade.
The loard of Trade show as the commerce of the Pritisls empire with forcign comntries. That is th say, they climinate all trade done between different constituents of the empire, and take only inports into the empire from foreign commeries and exports
from the empire to foreign countries. Here is the result compared with the commerce of the United Kingdom only:

Commerce of (i) the United Kingdom with all places outside it; and (2) the British empire, with all places outside it, in 1905:


At first sight it may surprise the reader to fincl that the empire's imports are no larger than those of the Unitcel Kinglom; but in calculating the empire's trade the large imports into the United Kingdom from Britisls possessions are, of course. excluded.

## Tie Empre's Minerals.

A wise man who handles this Abstract will quickly turn to the question of natural resources, and in particular coal.

We lave at home but 121,000 square miles; the empire has $11,300,000$ or so. But when it comes to coal, the mother comntry is first and the big empire nowhere.


So long as industry depends on cheap coal so long there cannot be any very great industrial developments in the lands with little or no coal. Canada camot rival the Linited States withont more coal or an efficient substitute for it. Iron figures, of course, are depentent on the foregoing coal figures. We need not, therefore, be surprised to find that the pigiron at present produced in the l3ritish empire outside these is.ands amomuts to only 471,000 tons.

Here is an interesting table of the chief mineral productions of the empire in 1905 :

Mineral. Pronuction.

| Coal (tons) .. .. .. . . . . . . . . . . $265,000,000$ |  |
| :---: | :---: |
| Iron ote (tons) . . . . . . . . . . . . . . . . . r 5,foo,00n |  |
| lig Iron ( $£$ ) . . . . . . . . . . . . . . . . . . . 10,079,000 |  |
| Diamonds ( $£$ ) . . . . . . . . . . . . . .. . . . . 6,760,000 |  |
| Ciold (f) . . . . . .. . . . . . . . . . . . . . $46,(x \times 0,000$ |  |
| Silver ( E ) |  |
| Copper ( $£$ ) . . . .. .. .. .. .. .. . . . . 4.18 |  |
| Tin ( $\mathrm{E}_{\text {) }}$ |  |

The coal and iron are almost entirely of Great Britain. The diamonds are South African. The gold is chiefly South African and Australia. (The United Kingdom produced $\mathfrak{\text { f } 2 1 , 2 2 2 \text { worth of gold }}$ and $£_{19,419}$ worth of silver in 1905). The silver is chiefly Canadian, and the copper is chiefly South African. The Malay States account for nearly all the tin.

The great diversity of production which characterizes the various British possessions in respect of minerals is as con-picuous when we consider other products: Here is the imperial wheat production (1905):

## Empire's Wieeat Production.

Mill. Bushels.
Canada . . . . . . . . . . . . .. .. . . . . .. 106
United Kingdom .. .. .. .. .. .. . . . . . 60
India . . . . . . . . . . . . . . .. . . . . .. .. 319
Australia .. .. .. .. .. .. .. .. .. . . . . . . 69
New Zealand .. .. .. .. .. .. .. .. .. .. 7
Cape of Good Hope and Natal . . . . . . . . . .
Orange Colony .. . . .. .. . . .. .. .. .. o I-2
Cyprus .. .. .. .. .. .. .. .. ..... .. .. .. 2
It is impossible to survey these pages without a growing wonder that a few men chiefly drawn from the United Kingdom should have accomplished so much. Here we have a record of over $11,000.000$ square miles of territory, containing some $350,000,-$ ooo people of hundreds of races and languages, administered and developed by a relative handful of white men only some $12,000,000$ in number.

The Natural History Museum, Union street, is to be congratulated on the fact that the private collection of insects made by the curator, Mr. William MoIntosh, has been added to its other treasures. This represents the work of twelve lusy years and is very valuable. As far as the insects of New Brunswick are concerned it is the largest collection in the world and it is much the largest in the Maritime Provinces. There are more than 20,000 specimens in the collection and many of them very rare specimens.

## 5,000 Facts About Canada.

A remarkable little booklet has heen compiled under the above self-explanatory tithe by Frank I'eigh of Toronto. the well known writer and lecturer on themes Canadian. Perhajps no one in the Dominion is better qualified to make such a compilation. Its value is, as clamed, "worth its weight in Yukon gold or Cobalt silver." The idea is a clever onc, viz.: a fact in a sentence, giving a wonderful mans of infurmation in the smallest compass on every phase of our commercial and industrial life and our natural recources. The breklet is sold for 250 . and may be had from newsicalers or from the Canadian Facts Publishing


## Empire Day Selections.

He serves his country best
Who lives pure life, and doeth righteous deed,
And walks straight paths, however others stray And leaves his sons as uttermost bequest A stainless record which all men may read. -Susan Coo:idge.
Our country is a whole, my Publius, Of which we all are parts; nor should a citizen
Regard his interests as distinct from hers;
No hopes or fears should touch his patriot soul But what affect her honour or her shame.
E'en when in hostile fields he bleeds to save her,
'Tis not his blood he loses, 'tis his country's;
He only pays her back a debt he owes.

- William Cowuper.

There's a flag that waves over every sea, No matter when or where;
And to treat that flag as aught but the free Is more than the boldest dare.
For the lion spirits that tread the deck Have carried the palm of the brave;
And that flag may sink with a shot-torn wreck, But never float o'er a slave.
Its honour is stainless, deny it who can; And this is the flag of an Englishman.
-Eliza Cook.
Land of our Birth, our Faith, our Pride, For whose dear sake our fathers died; O Motherland, we pledge to thee, Head, heart and hand througlt the years to be.
-Rudyard Kipling.

## Play the Game.

There's a breathless hush in the close tonightTen to one and the match to win-.
Pumping pitch and a blinding light. - An hour to play and the last man in. And it is not for the sake of a ribboned coat Or the selfish hope of a season's fame,
But his captain's hand on his shoulder smote"Play up, play up! and play the game!"
The sand of the desent is sodden red, Red with the wreck of the square that brokeThe Gatling's jammed and the colonel dead, And the regiment blind with dust and smoke. The River of Death has brimmed its banks, And England's far, and Honor a name;
But the voice of a schoolboy rallies the ranks: "Play up, play up! and play the gatne!"
This is the word that year by year, While in her place the school is set; Every one of her sons must hear And none that hears it dare forget.
This they all with joyful mind, Lear throngh life like a torch in flame, And falling fling to the host behind.
"Play up, play up! and play the game!"
-Henry Nerabo:t.

## The Review Question Box.

G. C.-In the grammar used in Nova Scotia Schools, on page 33, it says: "An intransitive verb is made transitive by the addition of a preposition so closely united with it as to become a part of ttself." Another authority states that a preposition is never put with the verb in analysis, but the preposition and phrase following it were put in extension. Kindly give your opinion in Review.

This is one of the grammatical questions on which anthorities differ. West, in his "Elements of English Grammar," says: " Prepositions following intransitive verbs may be regarded as forming witls them compound verbs which are transitive. Thus, ' I laughed (intrans.) at him.' Where the preposition at takes an objective case him, becomes "l laughed at (trans.) him,' where the him is the object of the verb. The passive construction can then be employed, and we can say, 'He was laughed at.' So, 'we arrived at this conclusion' becomes in the passive, 'this conclusion was arrived at." "They' came to this decision' becomes 'this decision was come to.'"

But Mason, in his "English Grammar," contradicts West's statement in the following way :

The direct object of the verl, is not indicated by prepositions. A substantive preceded by a preposition alatays constitutes either an attributive adjunct or an adverbial adjunct.
This statement is nor invalidated by the remarkable freedom of English in the use of the passive voice. "I am speaking of you" is precisely analogous to the French "Je parle de vous," and the Latin "Loguor de te." Nobody would for a moment admit that loquor de makes a compound transitice ererb, and that de has ceased to be a preposition and become an adverb united to the verb.
Mason, then, agrees with the second anthority quoted in the question, and would put the prepositional phrase in the extension. He disposes of the argument from the construction of the passive voice as follows:

The word that is the object of the active verl) must be the subject of the passive. In the strict sense of the above, only transitive verbs could poperly be used in the passive voice, and only the direct object of the active verl cond become the subject of the passive verl). 'This is in fact the usage in Latin and German. But English has bended the accusation and the dutioc in one case, the 'objective', and as a consequence of this allows (in most cases) the objectize of cither kind of wbject to become the subject of the passive. 1 told him the news, becomes either he was 1old the news, or the news was told him.

This is an interesting point in grammar, and we shall be glad to bear argwments on either side. Mason's seems the simpler rule to put in practice: for, who is fo decide whether or mot the prepessition is "so closely miterl with the verb as to become : part of itself?"

Esperanto: A correspondent from Steeves Mountain, N. B., writes in answer to Mr. Garland's question in our April issue: "Esperanto-in Twenty Lessons, with vocabulary, by C. S. Griffin, can be secured from A. S. Barnes \& Co., Nẹw York ; price 55 cents by mail."

The following questions have been sent in for solution: Todhunter and Loney's Algebra. Ex. 39, No. 25; and Ex. 37, No. 27.

```
I.
            \(4 x^{2}-6 y z-\left(9 y^{2}+z^{2}\right)\)
        \(=4 x^{2}-\left(9 y^{2}+6 y z+z^{2}\right)\)
        \(=(2 x-3 y-z)(2 x+3 y+z)\)
        \(9 y^{2}-\left(4 r^{2}-4 r z+z^{2}\right)\)
        \(=(3 y-2 . x+z)(3 y+2 x-z)\)
            \(z^{2 \prime}-\left(4 r^{2}+12 \cdot r^{2} y+9 y^{2}\right)\)
        \(=\left(z-2 x^{\circ}-3 y\right)(z+2 . x+3 y)\)
L. C. MI. \(=\left(2 . x^{2}+3 y+z\right)\left(2 . x^{\circ}-3 y^{\prime}-z\right)\left(3 y+2 . x^{-}-z\right)\)
2. \(a^{2} x^{3}+a^{3}-2 a b r^{3}+b^{2} x^{3}+a^{3} b^{2}-2 a^{4} b\)
    \(=r^{3}\left(a^{2}-2 a b+b^{2}\right)+a^{3}\left(a^{2}-2 a b+b^{2}\right)\)
    \(=\left(a^{-3}+a^{3}\right)\left(a^{2}-2 a b+b^{2}\right):\)
    \(=(x+a)\left(x^{2}-a x+a^{2}\right)(a-b)^{2}\)
    \(2 a^{2} \mathrm{x}^{4}-5 a^{4} x^{2}+3 a^{4}-2 b^{2} x^{4}+5 a^{2} b^{2} x^{2}-\)
        \(3 a^{4} b^{2}\)
    \(=2.1^{-4}\left(a^{2}-b^{2}\right)-5 a^{2} x^{2}\left(a^{2}-b^{2}\right)+3 a^{4}\left(a^{2}-b^{2}\right)\)
    \(=\left(2 . l^{-4}-5 a^{2} x^{x^{2}}+3 a^{4}\right)(a+b)(a-b)\)
    (Apply \$126).
    \(=\left(2 x^{2}-3 a^{2}\right)\left(x^{2}-a^{2}\right)(a+b)(a-b)\)
    \(=\left(2 . r^{2}-3 a^{2}\right)(a-a)(x+a)(a+b)(a-b)\)
H. F. C. \((\cdot-+a)(a-b)\).
```

R. E. Fraser, Kouchibouguac. What is the least number that ean be subtracted from 6o, that it may be divided by $6,3 / 4$ without remainder?
(w) reduced to fourths $=2.40$
$6,3 / 4$ reduced to fourths $=27$
$240 \div 27=8$ times and 24 fourths over $=6$
$60-6=54$
$54 \div 6=8$ times.
Therefore 6 is the least number.

A thoughtful subseribe:. desirous of severing his connection with the Risvisw, writes: "As I see by the last issuse of my paid-up subseription expires with ntmber 239. I Would ask you to discontinte sending it, as I an not teaching now. I write this as I notice that yon wish to be motified whether a contimance of the paper is desired or mot." Somethnes onf subscribers neglect this simple act of notification, and the result is loss and confusion.

[^27]-hacy Larcom

## The Last Poem of Dr．Drummond．

Dr．Drummond＇s last public appearance in Montreal was at the ammal dinner of St．Patrick＇s Society of Mon－ treal，held at the Windsor Hotel，on the evening of Mon－ day，March 18th．The well－known writer was received with great applause on that occasion，and told his audience a number of good stories，and finished by reading a poem which he had composed for St．Patrick＇s Day，and which was very warmly received．The poem is as follows：

## We＇re lrish Yet．

What means this gathering to－night， What spirit moves along
The crowded hall，and touching light Each heart among the throng
Awakes as though a trumpet blast Had sounded in their ears
The recollections of the past， The memories of the years？

O ＇tis the spirit of the west， The spirit of the Celt，
The breed that spurned the alien breast， And every wrong has ielt－
And still tho far from fatherland， We never can forget
To tell oursclves with heart and hand， We＇re Irish yet！We＇re Irish yet ！

And they，outside the Clan of Conn， Would understand，but fail，
The mystic music played upon The heart－strings of the Gael－
His ear，and his alone can tell The soul that lies within， The music which he knows so well， The voice of Kith and Kin．

He hears the tales of old，old days， Of battle fierce by ford and hill，
Of ancient Senachie＇s martial lays， And race unconquered still－
It challenges with mother＇s pride And dares him to forget
That tho＇he cross the occan wide， He＇s Irish yct！He＇s Irish yet！

His eye may never see the blue Of Ireland＇s April sky，
llis ear may never listen to The song of lark on high， But deep within his Irish heart Are cloisters，dark and dim， No human hand can wrench apart， And the lark still sings for him．

We＇ve bowed bencath the chastening rod， We＇ve had our gricfs and pains，
But with them all，we still thank God， The blood is in our veins：
The amesent hbod that knows no fear， The Stamp is on us set．
And whoweser foes may jeer， Wぐャ lri－h yet！Wére Irish yet！

## Nature Quotations for May．

Arranged by Annetta F．Armes in＂Porular Educator．＂
Onward and nearer rides the sun of May； And wide around，the marriage of the plants Is swectly solemnized．
－Ralph Waldo Emerson．
The voicc of one who goes before to make
The paths of June more beautiful，is thine．
－Helen Hunt Jackson．
Hebe＇s here，May is here！
The air is fresh and sunny；
And the miser bees are busy
Hoarding golden honey． －T．B．Aldrich．
Now the bright morning star，day＇s harbinger，
Comes dancing from the east and leads with her The flowery May，who from her green lap throws The yellow cowslip，and the pale primrose．
－Milton．
And hark！how bright the throstle sings ！
He, too，is no mean teacher．
Come forth into the light of things
Let Nature be your teacher．
－Wordsworth．
Among the changing months，May stands confest The swcetest，and in fairest colors dressed．
－Thomson．
Spring＇s last born darling，clear－eyed，sweet，
Pauses a moment，with white twinkling feet， And golden locks in breezy play，
Half teasing and half tender，to repeat
Her song of May．
－Susan Coolidgc．
The scarlet maple keys betray
What potent blood hath modest May．
－Ralph Waldo Emerson．
All day in the green，sumny orchard，
When May was a marvel of bloom，
I followed the busy bee－lovers
Down paths that were swect with perfume．

- M．E．Sangster．

The rokins sang in the orchard，the buds into blossoms grew，
Little of human sorrow the buds and the robins knew！
－J．G．Whittier
And hark！and hark！the woodland rings；
There thrilled the thrush＇s soul；
And look！that flash of flamy wings－
The fire－plumed oriole．
－O．W．Holmes．
And every little bird upon the tree，
Ruffling his plumage bright，for ecstacy，
Sang in the wild insanity of glee．
－Phocbe Cary．
And the swaying yellow bird，
Trilling，thrills each hollow stem，
Until every root is stirred，
Under their dropped diadem．
－Lucy Larcom．

## Canada Forever.

When our fathers crossed the occan In the glorious days gone by, They breathed their deep emotion In many a tear and sigh-
Tho' a brighter lay before them Than the old old land that bore them, And all the wide world knows now That land was Canada.
So line up and try us, Whoever would deny us The frecdom of our birthright. And they'll find us like a wallFor we are Canadian-Canadian forever. Canadian forever-Canadian over all.
Our fathers came to win us
This land beyond recall-
And the same blood flows within us Of liriton, Celt, and Gaul-
Keep alive each glowing ember Of our Sineland, but remember Our commery is Canada
Whatever may befall.
So live up and try, ctc.
Who can blane them, who can blame us
If we tell ourselves with pride
How a thensand years to tame ns
The fore has often tried- -
And should eer the Fmpire need us,
She'll resuire no chains to lead hs,
For we are Empire's children-
But Canadian over all.
Then line up and try us, etc.
-ldilliam Henry Drummond.

## Echoes From a Boy's Garden.

Louthe Kipin Mhifre is N. Y'. Schowh. Jourmal.. (Comacluded.)
A few weeks later:
"Can you tell me what is the matter with my squash vine?" said Carl, coming with a large, brilliant orange blosson in his hand. "I have hoed it, put some commercial fertilizer aroumf it, and picked off every squash lour I could find, and only a few of the blossons have squashes on them."
"That is a very matural guestion to ask. Who planted cucumbers?"
"I did," answered 1 tugo.
"Will you please su (1) your garden and see if you can find any difiference in your cucumber hossoms. James, examine your pumplin vines."

In a short time the beys returned with the different kinds of flowers, mach to the gardeners astonishment.
"Robert, yon may bring me the smatl connstalls from your garden. Wie will ceamine the symath,
 your finger in the blosumm arhich has no squash.
" It is covered with yellow dust," exclained jo.
"Can you find yellow dust in the other flower?"
I asked, watching him make the trial.
"No," he responded, "the inside of the flower is a different shape and it is sticky."
"Shake the yellow dust or pollen into that flower. What happens?"
"It sticks fast. What is that for?" opening his eyes in astonishment.
"The flower that bears the yellow dust is called the staninate flower. These little things that hold the pollen are the stamens. The other is the pistillate flower, and has the parts that will develop into seeds. We will cut through the flower 'that has the squash.' "
"Look at the little seeds!" cried Henry.
" (Oh, they're not seeds," saild Mike. "Would you like to plant them? No use. They wouldn't grow. They are not ripe."
" You are quite rig!t. They are not seeds, but ovules which will develop into seeds. Do you see that bee coming from that flower with his legs and bexly covered with polien? Wateh him."
"I wonder if he will find a flower with a squash Y'es, there he goes," said Fred.
"Let us go and watch him," said Robert, much exeited. "Don't frighten him away. He seems to know just where to find the honey. See how he crawls over the sticky surface!"
"Off he goes!" said Mike.
"Ah, there it is-the yellow dust he dropjed!" exclainced Dick.
"All that was very simple, but now the womer begins."
"What is that?" inguired James, with eager, listening eyes.
"When a pollen grain drops on the stigma of the pistil, as the sticky surface is cal:col, it legins to gerninate, or grow, and send down a pollen tubs tw one of the little ovales which you see, giving it whe leclp, it necels to make it develop into a perfect seed. I little plantlet is formed in each seel, and. while the seed ripen, these parts begin to thicken to form a protection for the growing seeds. Hand me some beans, Mike, please. Each of you take one and carefily remove the seed cont and examine the imside."
"Just look at the little plantlet!" said Preel.
" lsult it womlerful? " saill llemry, serinusly.
Whes each wowle need the leelp of a pollen gratin (1) make it a seed?"
"Yes, think of all the seeds that will be found in the garden this summer. All flowers are not alike. Each has its own secret, which is worth finding out."
"I suppose there is something interesting about this cornstalk," said Carl, looking at it.
"Who can find the pollen?" I asked, shaking the stalk.
" I know," exclaimed Diek; " in the tassel at the top."
"The ovules are all covered with these husks. How do they get the help from the pollen?" A queer expression was on the face of the boys.
"Let us remove the husks and-_"
"Look at the silk!" interrupted Robert. "Why, each grain has a piece of silk. Oh, I know; the silk grows out beyond the husk and the pollen grain drops on the end of the silk," which was very good reasoning for Robert.
" But what a long pollen tube would have to grow to get down to some of the ovules," said Henry.
"Do you see any ovules that have not developed?" I asked, holding the ear up to view.
" Just look at the little grains around the top of the ear," said Carl, amused. "The silk was so short it could not get out of the husk, and did not get the pollen. Well, that is interesting."
"All go to your gardens and examine the flowers and pods of your peas and beans, and see if they have anything to tell you.
" You did good work while I was away, boys. The gardens look very well. They show who are the good workers."
"We have had such a good time and learned so many things," said Henry.
"Did you have any trouble with insects?" I inquired.
"Insects!" he exclaimed. "I should think so. We made a collection of the different ones we found-fifty-three."
"Which gave you most trouble?"
"Potato bugs, but we put 'bug death' on the vines and that finished them," he said, with great satisfaction.
"We find. if you want to destroy insects, you must know something of the way in which they take their fooll," said Joe, repeating some information he hatd recently acopured.
"What do you mean?" I inquired.
*Well, a pmato bug has biting mouth parts and eats the leaves. If yon put pison on the leaves they cat it, tor, and that kills them."
"But," comtimued Jancs, "a squath bug is differ-
ent. He has a little sttcking tube he puts into the leaf and sucks the sap, and would not get the poison. He has to be killed in another way."
" Are you interested in insects, John?" observing him listening to our conversation.
"Very much, and we have found so many different kinds. The lovely ground beetles, we were told, are predaccous, because they destroy wire worms and many bugs."
"Will you please look at my beets and carrots?" said Fred, from a distant garden. "I think they are fine!"
"What do you think of my squashes?" asked Henry, with pride.
"What have you done with all the vegetables yout have raised?" I inquired, with interest.
"Ate some, sold some, gave some away, and these good things we are going to take to the fair," said Joe.
"I should like a list of the flowers and vegetables you raised, and one of the insects you found."
"Are we to have an exhibit at the fair?" inquired Dick.
"Yes, some special prizes are to be given for the products of the Boys" Garden. That will end the work for the year. Do any of you want a garden next year?"
"Yes, indeed!" "We all do." "May I have my same garden?" "About twenty more boys want gardens," was the hearty response.

## CURRENT EVENTS.

The new Province of Superior is as yet only a suggestion. It is not very probable that it will ever be more; but it expresses a wish of some of the residents of the northern part of Ontario to have that great province divided, setting off as a separate province the present districts of Nipissing, Algoma, Thunder Bay and Rainy River. Thus area, now often called New Ontario, has a population of about 125,000, and comprises about three-fourths of the area of the present Province of Ontario.
Next year will bring the three-hundredth annivensary of the founding of Quebec; but the executive committee of the proposed tercentenary celehration have decided to postpone it to July, 1909, to give more time for the necessary preparation.
In the new battleship Aki, recently launched in Japan, the Japancse have the greatest battleship in the world, exceeding the British ship Dreadnought by 1300 tons.

Commander Peary will make another attempt this year to reach the North Pole. His crew will consist entirely of young Newfoundland fishermen who are members of the colonial naval reserve.

Beginning next ycar, a new direct line of steamers will run from Vancouver to Great Britain by way of New Zealand and Australia. This will divert to Vancouver much traffic that has formerly passed through San Francisco.
The Department of the Interior has issued a new atlas of Canada which is said to be the most complete publication of its kind ever produced in any country. Only one other country has issued an atlas giving such a diversity of information, and that country is Finland. This may be surprising information to many of us, who are inclined to think of Finland as many think of Canada, only as a country of ice and snow. Equally surprising will be the news that Finland is the first country in the world in which women have been elected to seats in the mational legislature. There are nineteen women in the Finnish Diet.

One-fourth of the people of British East Africa depends upon the cotton crop for their living. .Not only will British possessions in Africa soon supply all the cotton needed in the mother country, but will supply it at a price, it is hoped, that may enable British manufacturers to supply the American market.

The Wakamba, a Bantu tribe of Uganda, are the most highly civilized black race in Africa. When first visitecl by white men, they had a decimal system of calculation and understood the working of iron.
Potasimite is a new explosive in use in Mexico. It is pronounced safer, cheaper and more powerful than dynamite; and, still more important for mining operations, it produces no noxious gas.

The supposition that the gold of Ophir, with which Solomon enriched the temple in Jertusalem, eame from Mashonaland, in South Africa, is discredited by late investigators. The distance is said to be far too great; and the architectural ormaments found in the abandoned gold mines are too crude to have been madc by the workmen of King Solomon,
The new railway recently opened for traffic across the Isthmus of Teluantepec reluces the distance from New York to Ifonolulu to five thousand seven hundred milesnearly a thousand miles less than by way of I'anama.
The Russians and the Japanese have completed the evacuation of Manchuria, and the vast region is again under the government of China. The policing of the country and the repression of the Chinese handits have been turned over to Chinese tromps.

In ealling the second llague Conference, the Russian government has proposed the following subjects for di-cussion: The settlement of international disputes by an international court; the laws and customs of warfare on land, especially as to the opening of hoctilities and the rights of neutrals; the laws and customs of maritime warfare, and the adaptation to maritime warfare of the principles of the Geneva Convention of 1864.
It is remarkalle that at the colonial conference in Lomdon looth Canada, the premier colony of the Fmpire. and the 'Transvaal, the gonngest colony, are represented by men belonging to races formerly not owing allegiance to the Priti.n! Crown. 1?oth Sir Wilfrid Laturier and Cencral Botha have been enthusiastically received. The former, though British born, as we all know is of Frencli-Canadian
descent; the latter, born in the British colony of Natal, is of Dutch and French Huguenot origin. Sir Wilfrid represents six million Canadians; Alfred Deakin, premier of the Australian Commonwealth, represents oun four million fellow subjects in Australia; Dr. Jameson, two and a half million in Cape Colony; Gen. Louis Botha, more than half that number in Transvaal; Premier Moor, over a million in Natal, and Sir Joseph Ward nearly as many in New Zealand; while Sir Robert Bond represents about a quarter of a million inlabitants of the ancient colony of Newfoundland. The message which Gen. Botha brings from the Transvaal is that the new colony wishes to strengthen the bonds of co-operation and love and unity of the Empire; and Dr. Jameson expressed the hope that the next conference would see all South Africa ranged with the Dominion and the Commonwealth, and represented by one federal minister. A practical outcome of the conference is the creation of a general staff to take command of all the military forces of the Empire.

On the 26th of April, three hundred years ago, three small vessels cast anchor on the coast of Virginia, bringing the few persons who later founded Jamestown and established there the first permanent English settlement on this continent. On the same date this year, the fleets of the leading nations of Europe were anchored near the spot, to celebrate the tercentenary anniversary of that event, as the guests of the great American nation that has sprung from that beginning. The British squadron is the most powerful of the visiting fleets. After taking part in the opening ceremonies of the Jamestown exhibition, it will visit Quebec, where it will arrive on the t2th of June and remain until the 24 th.
King Edward's visit to Spain is said to matk the conclusion of an agreement between the two nations by which British ships shall have the use of Spanish ports, and Britislı squadrons guarantec the sceurity of Spanish coasts.
It is understood that an arrangement has been made hetween Great Britain and Canada whereby British newspapers and periodicals will come io Canada at greatly reduced postal rates.
The custom of flying the mational flag over school buildings is one that we have learned from our New England neighbors. The provincial board of education is to urge upon trustces the desirability of flying the Canadian flag over cevery school buitding in New Brunswick. If the school district can not afford to buy a tlag, the board of education will assist.
An amusing and rather significant incident in connection with the recent little war in Central America was that a party of United States marines eompelled the leader of an hisurgent band to apologize for an insult to the British flag.

## SCHOOL AND COLLEGE.

Walter W. White, M. D., has been appointed a member of the Senate of the University of New Prunswick, in room of Hon, L. J. Tweedie, resigned.

At a meeting of the IRoard of Education in Frederictom, on $A$ pril $13 h^{h}$, the sub-committee appointed to investigate the cost of text books for schools, composed of Dr. Iuch, Chancellor Jones, and Solicitor-General Jones, submitted a report, in which they recommended that text books be sup-
plied to pupils free of charge. Consideration of the report was deferred until a future meeting.

Fredericton is to have a new normal school building, as the present quarters are overcrowded. The new building will be three stories high, and will be fitted with all modern improvements, with facilities for manual training, domestic science, and nature study. Provision will be made in the grounds, which are to be enlarged, for school gardens.
On May 3rd, Dr. Inch will sail for England, and on the 24 h will attend an educational conference, which will be held in London under the auspices of the League of the Empire. The leading spirit in the league is Lord Meath, and its purpose is amonnced to be the closer union of all countries subject to King Edward. The League of the Empire is best known in this country by its work in promoting correspondence among school children of widely scparated British colomies. There are many schools in this city and province, the scholars of which are writing to the children of far-away Australia or South Africa. In a recent amual report, Dr. Inch said: "The League of the Empire is arr association of prominent statesmen and educationists who are aiming to bring into closer relation all schools, colleges and universities of the British Empire for purposes of co-operation and mutual benefit. The president of the league is Canada's high commissioner, the Right Hon. Lord Stratheona and Mount Royal, G. C. M. G. Its vice-presidents and members represent every part of the empire." Besides its correspondence branch, which numbers many thousands among its members, the leagne employs a large staff of practical lecturers, who give lectures on the colonies in schools and public halls thronghout England. Exhibitions representing the schools of the empire have been held in the Crystal Palace at which all kinds of school work are shown. Time tables and photographs, presented by the colonies, are on exhibition in the league's headquarters, Caxton Hall, Westminster. During his stay in England, Dr. Inch will visit different classes of schools with a view of acquiring ideas to be applied in his work here. He will in a measure return the visit of the English school teachers who visited New Brunswick schools in December.

MeGill University, and through her the whole Dominion. have suffered heavy and irreparable losses by fire during the last month. Within two weeks from the occurrence of the fire which destroyed the fine science buildings, the medical building of the University was burned. In both cases, much has been destroyed that can never be replaced. and white the money loss in the destruction of the buildings themselves is very scvere, it is comparatively mothing leside the loss of the musenm. The collections contained many priceless specimens, which have been collected during three-cquarters of a century. Also, Dr. Sheppard's anatomical coltection, which was famons throughont America, and represented a life time's work, was entirely restroyerl. It is a matter for congratulation that the magnifiecont medical library escaped the flames.

## RECENT BOOKS.

Firmm the Macmillan Company of Canada, we have recivel: "The Persistent I'robleme of lhilosophy;" an atonluced to metapliysics throngh the study of modern atom. ly Mary Whiton Calkins, Professor of

Psychology and Philosophy in Wellesley College (price $\$ 2.50$ net). Also an "Elementary English Composition," by T. F. Iluntingdon, a book that will certainly hold its own by its many excellences, among the many good textbooks on this subject. We are glad to notice that a good deal of space is given to oral composition, and especially that the importance of practice in pronunciation is insisted upon (price Co cents net.)

Ginn \& Co. are well known for their co-operation in the movement for the better teaching of English. Their attractive editions of English classics are a great aid to the tatcher. Wc have rcceived from them copies of Scott's "Quentin Durward," ( 504 pages, mailing price 60 cents). and Goldsmith's "Deserted Village," (pp. 32, mailing price 30 cents), both issued in their "Standard English Classics" series. Hudson's edition of Shakespeare's plays is too well known to nced comment here, but Ginn \& Co. are now bringing nut a new and revised Hudson's Shakespeare for school use. "As you Like It," and "The Merchant of Venicc," have already appeared. The introductory matter is valuable and not too diffuse, and the chronological chart is a useful addition. The notes are good and have the advantage of appearing at the foot of the page. We can heartily recommend these little volumes. (Mailing price 55 cents.)

The same publishers send us two laboratory guides, one on zoology, to accompany Linville \& Kelly's "Text-book in General Zoology," and the other "Exercises in Chemistry," by NePlerson and Henderson, to accompany their "Elementary Study of Chemistry;" (mailing price 45 cents each). The former hand-book would be useful to the younger members of onr Natural History Societies, and to the teachers whose nature study lessons include forms of animal life.

Messtr. Geo. Philip \& Son, London, publish "A Junior Course of Comparative Geography," to be used with their "Progressive Atlas." The very full sets of questions and cxercises and the use of plates and pictures, are noticeable features of this attractive volume (price 2s. 6 d .)

Messrs. Geo. Philip \& Son, 32 Fleet Street, London, E. C., publish a handy volunve Atlas of the World, price 3s. 6d., with very plain maps and much valuable statistical matter carciully revised to date.

## RECENT MAGAZINES.

The Delincator for May sets a great variety of reading lefore its subscribers, as well as the usual number of pages devoted to fashions and honsehold matters. Two delightful serials are ruming in this magazine. "The Chauffeur and The Chaperon," and "Fraulein Schmidt and Mr. Anstrnther," a story which quite sustains the reputation of the anthor of "Elizabeth and Her German Garden."

The liaing $A g e$ can be relied upon to furnish interesting reading on the affairs of foreign nations, and on topics of the day. For instance, the issue for April 6th contains an article on "The Second Duma" and one on the situation in Germany. while that for April Izth has a most readable and informing paper on "The State Children of Hangary," and one by Lord Dintaven on the "Reform of the llouse of Lords."

The I'nizersity Magazine, published by the Macmillan Co., is a contimation of the McGill University Magazine;



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its main purpose is avowed to be that of expressing an ecfucated opinion upon questions immediately concerning Canada. Accordingly, we find in the February issue, an interesting paper entitled "What will the West do with Canada," and an article on Canadian Art and Artists. All the papers are of a high order of literary merit, and the whole appearance and tone of the magazine are admirable.

## Educational Department New Brunswick.

## OFFICIAL NOTICES.

Department Examinations, 1907.
(a) The High School Entrance Examinations will begin at all Grammar and Superior Schools on Monday, June 17th.
At these examinations the Liettenant-Guvernor's Medals are 10 be competed for, in accordance with instructions issued from the Education Office.
(b) The Normal School Closing Examinatians for License will be held at the Normal School, Fredericton, and at the Crammar School buildings, Chatham and St. John, beginaing on Tuesday, June inth, at nine o'clock, a. m .
(c) The Normal School Entrance Examinations and Preliminary Eraminations for Advance of Class, the High School Leaving Examinations and the Unizersity Matriculation Examinations will be held at the usual stations throughout the Province, Leginning at nine o'clock, a. m., on Tuesday, July 2 nd.

Examinations for Superior School License will be held both at the June and July examinations.

For further details in regard to the Departmental Examinations, see School Manual, Regulations 31, 32, 45 and 46.

## Close of Term.

The number of Teaching Days in present Term is 121 , except in the City of Saint John, where the number is $\mathbf{i z O}$. The last teaching day of the Term is Friday, June 28th.

The First Teaching Day of next Term will be Monday, August 12th, except in Districts having cight weeks' summer vacation, in which Districts the schools will open August 26th.

English Literature For High Schools, 1907-8.
Grade IX. Selections from Reader No. V, and Scott's Lady of the Lake.
Grade X. Macaulay's Lays of Ancient Rome. Hawthorne's Tanglewood Tales, Part I, Scott's Ivanhoe for Supplementary Reading.
Grade XI. Shakespeare's Henry V. Milton's Lycidas, Il Penseroso and L'Allegro. Dickens' Tale of Two Cities for Supplementary Reading and Essay Work.

The Literature for Grade XI will be used in examinations for Candidates for First Class, Matriculation and Leaving Examinations in 1908.
J. R. Inch,

Chief Superintendent of Education.
Education Office,
April 25th, 1907.

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[^0]:    N. S. SHALER, chairman,

[^1]:    Education Office, April 20, 1905.

[^2]:    * Pages and lines as in reading for grades 7 and 8 , Nova Scotia School Scries.

[^3]:    *Lines numbered ns in N. S. School Serios.

[^4]:    Monday-
    I am a very busy day,
    I just come after Sunday;
    But many people slander me
    And say, I am "blue Monday."
    I play upon the wash-board,
    Which if every one would use,
    They never would be troubled with the blues.
    Tuesday-
    Good evening, sister, here I am,
    And I have work to do.
    For though the clothes are nicely washed,
    They must be ironed, too.
    I starch and iron everything,
    And lay them all away;
    So you will see that I must be
    A very busy day.
    Wednesday-
    Dear me! I have so much work to do;
    For though the clotles are washed and ironed
    They are not made to cat!
    I make the bread, the cake, the pies,
    Doughnuts, and cookies, too,
    With sugar and spice, and all things nice, I work as well as you.
    Thursday-
    There's something left for me to do
    Which I will never shirk,
    I cut and fit, and sew and knit,
    Such is my daily work.
    What children wear they offen tear, When other work is through.
    With thimble, thread and needle bright,
    I make them nice and new.

[^5]:    * Pages of N. S. School Series.

[^6]:    Fiverwhere, everywhere. Chri-lmas to-night; Chriamiss in lands of the fir tree and pince, Chrishmas in latnds of the palan tree and vine Chrismas where snow peaks sand solemn and white, Chrintmas where cornfielde lie sumny and bright; Christmas where children are hopefal and gay, Christmas where old men are patient and gray; Christmas where peace like a dove in his flight, Brouls rier brave men in the thick of the fight; Eserywhere eserywhere, Chrismas fo-might! For the Christ-Child whor comes is the Masior of all: No palace too great and no collage loo small. - Phillips Brooks.

[^7]:    "langutr is not in your heat.
    Weakness is not i:l ye ur wora:
    Wearilless mot on your loras".

[^8]:    "Fame in the pher which the char pritit in har: ise
    (That last imfirnily "if mible mindo).
    tio ueorn delights and lise lalumenn day."

[^9]:    (In Question 12. Januarv broblems, "inches" slinuld bo "meters.")

[^10]:    *The two last are mall and low priced paper évered volumes, which may be phataded from .I. \& W. Nackimay, Halifax.

[^11]:    How many boncs in the human face? Fourneen, when they are all in place. How many bones in the crantum? Eiglit, unless you've mislaid some. liow many bones in the ear are found? Three in cacl, to eatch the sound. How many boncs are in the spine? Twenty-four. like a clustering vine. How many hones in the clrest are found? Twenty-four ribs, to the sternum bound. How many bones in the shoulder bind? Two in each-one before, one bolind.

[^12]:    I find each succeeding number of the Review more helpful than the last.
    B. G. O.

[^13]:    *See Bulletin Nat. Hist. Soc. of N. B., Vol. V, Part I, p. II.

[^14]:    What can a boy do and where can a boy stay If he is always told to get out of the way? He cannot sit here, and he must not stand there. The eushions that cover that fine rocking-chair Were put there, of course, to be seen and admired. A boy has no business to ever be tired.
    The beatiful roses that bloom
    On the floor of the darkened and delieate room Are not made to walk on-at least not by boys. The house is no place, anyway, for their noise. A place for the boys, dear mother, I pray,
    As eares settle down round our short carthly way: Don't let us forget lyy our kind, loving deeds To show we remember their pleasure and needs. Though our souls may be vexed with problens of life And worn with besetments and toiling and strife, Our hearts will keep younger-your tired heart and mineIf we give them a place in their innermost shrine, And to life's latest hour 't will be one of our joys That we keep a small corner, a place for the boys. -Boston Transcripi.

[^15]:    Guess the Name of the Poem.
    Guess the name of the poem that tells you the time, The poem where two are made one,
    The poem by which a wide river is crossed,
    The poem with which yarn is spun.
    The poem whose anvil rings loud 'neall his blows, The poem that falls from the sky,
    The poein that shines where the moon has grown old, The poem that cannot be dry.
    The poem where forests are stripped of their leaves, The poem that follows the deer, The poem that sails without cantain or crew,

    The poem that rings once a year.

    ## The Swallows.

    "Gallant and gay in their doublets gray, All at a flash like the darling of flame, Ohattering Arabic, Airican. IndianCertain of springtime, the swallows came l"
    "Doublets of gray silk and surcoats of pmplefe, And ruffs of rusect round ench ilitle thront, Wearing macts garb they luad emossed she witers. Mariners sailing with never a boat."

[^16]:    * I. Report of the Committec of Ten on Secondary Studies, with the Reports of the Conferences arranged by the Commiltec. New York: American Book Co., 1804. Pp. 249. 30 cents.

    2. Report of Committee of Fiffeen on Element:ry Education, with the Reports of the Sub-Committees: On the Training of Teachers: On the Corrclation of Studies
[^17]:    in Elemenary Education: On the Organization of City School Systems. Ncw York: American Book Co., 1895. Pp. 235. 30 cents.
    3. Report of the Committee on College Entrance Requirements. Chicago: The University of Chicago Press, 1899. Pp. 188. 25 cents.
    4. Special Reports on Secondary Edncation in Prussia: (1) Problems in Prussian Secondary Education for Boys. with Special References to Similar Questions in England, by Wichael E. Sadler. (2) Curricula and Programmes of Work for Higheł Sehools in Prussia. London: Wyman \& Sons, 1899 . Pp. $2^{\wedge}$ 凤. is.

[^18]:    * This article by Dr. Brittain appeared in the Ottawa Naturalist for July, 1906.

[^19]:    Arcturus, or the Dog Star, or the seven That circle without setting round the pole. It is for nothing at the midnight houn Thet solemn silence sways the hemisphere, And yet must listen long before ye hear The cry of beasts, or fall of distant stream, Or breeze among the tree tops, while the stars Like guardian spirits watch the slumbering earth?

[^20]:    THE HIGH SCHOOL COURSE will recoivo special attention in diseussing the Report of the Committee on High Schools and Colleges.

    There will be no afternoon sessions, so that members may be freo to study tho Natural History and Industrial Products of the Dominion at the Dominion Exhibition, which will be opell at that time.

[^21]:    THE EDUCATIONAL KEVIEW is published on the firsi of each month, except Juiy. Subscriptioo price, one dollar a year: single numbers, ten cents.

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    TIIE EDUCATIONAL REVIEW,

[^22]:    " Rome now! let us go unto Bethlehem, and see this thing which has come to pass, which the cord made known to us." said the shepherds, when those angel songs had ceased to break the starry sllence. Cheir way would lead them up the terrible hill, and through the moonlit gardens of Bethlehem, until they reached the summit of the grey ridge on which the ilttie town is built. On that summit stood the village Inn

    In the rude limestone grotto attached to it as a stable, among the hay and straw spread for the food and rest of the cattle, weary with their day's journey, far from home, in the midst of strangers, in the chilly winter night - in circum. stances so devold of all earthly comfort or splendour that it is impossible to Imagine a humbler nativity Christ was botm. Canon Farrar-The Life of Christ

[^23]:    "At the corner of Wond Sirect, when daylight appears. llangs a thronh that sings loud; it has sumg for three years."

[^24]:    I wonder what spendthrift chose to spill Such bright gold under my window-sill! Is it fairy gold? Does it glitter still? Bless me! it is but a daffodil!
    And look at the crocuses, keeping eryst With the daffodil by the sunshine kissed! Like beautiful buhbles of amethyst They seem. blown out of the earth's snow-mist. O Marels that blusters and March that blows, What color under your footsteps glows! Beauty you summon from winter snows. And you are the pathway that leads to the rose. -Celia Thaxter.

[^25]:    Cape North,
    Victoria Co., N. S.

[^26]:    THE EDUCATIONAL REVIEW is published on the first of each month, except July. Subscrlptioo price, one dollar a year; single oumbers, ten cents
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[^27]:    Dandelions dressed in gold.
    Give out echoes clear and loud,
    Fo the oriole's story, wid
    With galy poise and genture prond.

