

THE EDUCATIONAL REVIEW.

FOR THE ATLANTIC PROVINCES OF CANADA.

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ST. JOHN, N. B., DECEMBER, 1903

WHOLE NUMBER, 199.

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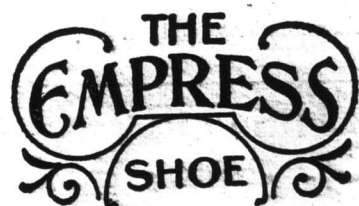
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THE REVIEW, with this number, enters on the second half of its seventeenth year.

THE REVIEW extends greetings to its many readers, wishing all a Happy Christmas and New Year.

WHAT could be more appropriate for a Christmas present than the handsome and convenient new edition *de luxe* of Webster's Collegiate Dictionary? It is a thing of beauty and can be constantly used, thus keeping the giver in lasting and grateful remembrance.

REMINDERS are sent out with this number. We hope they will receive early attention from our subscribers.

THE Sackville Post has issued a beautiful and appropriate Christmas supplement, containing chosen literary selections. The illustrations are especially choice, several of them being reproductions from noted pictures.

NEARLY all readers of the REVIEW remit their subscriptions promptly. This is fair and reasonable. That the REVIEW cannot be published without money is clear to everybody. And yet a few, a very few, think it can. They allow a bill to be sent to them time after time without attending to it. Or they leave a place without the courtesy of writing a note telling us of their change of address. This is unfair and unreasonable. A business notice is constantly kept on the editorial page with an invitation to "Always read." Is it not a lack of courtesy to allow a paper to be sent to an address when the person addressed is no longer there, with a certainty of loss to the publisher?

MR. AMOS O'BLENIS, principal of the Model School, Fredericton, has been appointed inspector of schools for Westmorland and Albert counties, New Brunswick, in place of the late George Smith. Mr. O'Blenis is a teacher of considerable experience, having had charge of several important schools in the County of Westmorland, and has been principal of the Model School for more than two years. He has risen from the ranks by native industry and application. He possesses teaching ability of a high order, and with his knowledge of the work of common schools, combined with his energy and executive ability he will undoubtedly prove an efficient inspector.

Mr. John E. Page, Principal of the Hartland, Carleton County schools, has been appointed principal of the Model School, Fredericton. Mr. Page is an experienced and successful teacher and is a graduate of the University of New Brunswick.

FROM the Antipodes comes a bright exchange, the *Australian Journal of Education*, that has a flavor of excellence about it that speaks well for education in the sister commonwealth. Long may it flourish!

THE *Ottawa Naturalist* is doing excellent service to the teachers of Canada by the publication of its series of valuable nature-study articles. The contributors are from different portions of the Dominion and well known for their interest in the subject. The papers when finished will be published in separate form and will make a useful contribution to nature-study.

THE St. John County Teachers' Institute programme will be found on another page.

THE announcements made by Chief Supt. Dr. Inch in another column are of great interest to all New Brunswick teachers, especially in regard to Lt.-Governor Snowball's generous offer of prizes.

THE *Atlantic Monthly* is the leading American magazine. Its prospectus on another page will interest all our readers.

CHAIRMAN C. R. HOBEN, of the Halifax School Board, makes a strong plea for superannuation allowances for teachers. His report is noteworthy for its progressive tone. He recommends the extension of manual training and the establishment of vacation schools.

THE Dominion Educational Association will meet in Winnipeg in July next. The last session was held in Ottawa in 1901. There should be a large attendance of teachers from the east, but in order to secure this result the meeting should be well advertised, and early and authentic information given as to the cost of the trip. Will there be a side trip, and at what cost, to the Pacific coast? This, if placed at a low rate, would be a great inducement for teachers to go to the association. The time suggested for the meeting is July 13-15. This would suit eastern teachers very well. The provisional programme will be ready, it is announced, in January. Mr. W. A. McIntyre, the secretary, and an efficient committee in Winnipeg, are working hard to have a great meeting. It is to be hoped their efforts will be crowned with success, and a representative body of teachers gathered from all parts of the Dominion, making the D. E. A. a reality rather than a name.

The Need of the Hour.

In another column Mr. Estabrooks, the president of the New Brunswick Teachers' Union, makes a clear and pointed statement as to the objects of that association, and one which should arouse the attention of every teacher in the province. His argument that in a season of almost unprecedented prosperity throughout the country, when wages of every class of workers and the cost of living have advanced, the salaries of teachers have not increased, is one that should weigh with every thoughtful man and gain for the movement consideration and sympathy.

From year to year we are placing a higher standard for our teachers to reach, and we believe the great majority of them are honestly striving to reach that standard. Do the people recognize this and show their appreciation by a material increase of salaries? Teachers who have expected it have been deluded. And what a foolish economy it is, and what a reckless waste, to have no permanence in teaching,—to see teachers compelled to leave the work when they have learned to do it with some facility and give place to those lacking experience and fitness.

Every community decides for itself the kind of teacher it will employ. Too often the one who will work for the least salary is preferred. Sometimes the people pay too much; sometimes they get what they pay for; often they receive far higher value and refuse to pay accordingly. This is the regrettable feature, and one which associations of teachers should strive to remedy by doing some missionary work such as the REVIEW pointed out last month. Who will look after this matter of properly adjusting teachers' salaries? Legislators can bring influence to bear upon communities; tax-payers can be educated to see the folly and parsimony of denying to teachers their rights; and teachers, especially those who occupy good positions and are in receipt of comfortable salaries can extend a strong helping hand to those who have taken the laboring oar in this movement. The great need of the hour is for all teachers to unite and study actual conditions.

The delegates from the various teachers' unions in New Brunswick will meet at 10 a. m. on the 22nd of December, in the Aberdeen School, Moncton, the use of the building having been kindly placed at their disposal by the Moncton School Board. There should be a full attendance of delegates, and we hope the discussion of this question may be carried on with spirit and wisdom,

An Example of Giving.

There are indications that people of wealth among us are realizing the duty of giving more extensively for the support of our higher educational institutions. Among evidences of this is the gift made by a lady in St. John of \$4,000 to the engineering department of the University of New Brunswick. This is an example which it is hoped may be widely followed. The university is specially in need of such generous donors. Chancellor Harrison in his report for the year recommends that chairs of forestry and agricultural chemistry be established. This is a recommendation that is of special interest to those concerned in the industrial development of the province. But money is required. The University has made rapid progress during recent years. It has now the largest number of students ever enrolled. The fine new science building, due largely to the energy of Professor Dixon, now of Dalhousie University, the excellent results that have followed Professor Scott's and Professor Jack's efforts to increase the efficiency of the engineering and science departments, point to a more modern and vigorous policy on the part of the University. The need of money was never more urgent than it is now, and it is hoped that the example set by a generous lady will stimulate many of large and small means to give.

The Real Gentleman.

The late Frederick Temple once gave the following outline of what he considered really gentlemanly conduct:

"The man who is thoroughly unselfish in all small things, he is the man in regard of whom it is quite impossible for you to feel, 'That man is a gentleman.' Let his rank in society be what it may, let him be ignorant of the ordinary conventionalities of social intercourse, still, if the man be truly self-sacrificing, if, in ordinary relations with his fellows, there is true and genuine unselfishness, it is impossible for any man who has much to do with him not to feel, 'That man is a gentleman.' I don't care whether he is learned or not, whether he is educated or not; I don't care if he be ever so poor; the man who constantly shows that he is giving himself up for the sake of other people, that man is at heart and in reality one of Nature's gentlemen, and this is the way in which he shows it."

Comment on Things Seen and Heard.

BY THE EDITOR.

The young teacher of the country school has to fight against many difficulties. She has been charged over and over again with being inefficient and with receiving a beggarly salary not equal to that of a cook or a washerwoman. But what if correct. Does it ever dawn on those who make these statements—often silly, always uncharitable—that the difficulties in many of these rural schools are well nigh insurmountable, and probably would be quite insurmountable to the careless critic. Many, very many, of these teachers triumph over these difficulties—ignorance, penny-wise and pound-foolish economy, lack of the means of culture, etc. They go out with little experience, it is true, but they have youth, buoyant hope and activity. The boys and girls catch the spirit of the young teacher's zest and enthusiasm, which chimes in so well with their own natures. Don't let us undervalue the gifts of health and enthusiasm of the young teacher. Many of them are doing their work very crudely, a few fail lamentably, but the great majority are patiently and heroically overcoming the obstacles that lie in their path. Let every encouragement be given them, for much of the welfare of the nation is dependent on these country school teachers.

It is pretty certain that Mr. Maggs, who in this number shows such a hearty appreciation of and sympathy for literature, is scarcely just in his attitude toward natural science. One cannot help a feeling of regret that the teacher who captivated him with that famous story of Quentin Durward had not during the intervals of literary work pulled him gently by the sleeve into woods and fields and there refreshed his own spirit and cultivated nature, a kindred subject to literature, in an apt pupil. If nature is studied in the dry mechanical way that Mr. Maggs intimates 'tis a pity that any time is given to it *in school*.

Mr. Elbert Hubbard, head of the Roycroft Industrial College, at East Aurora, N. Y., has just refused a gift of \$1,000,000 from John Farson, the great financier of New York. Mr. Hubbard's answer has something of the heroic in it, and perhaps may be an incentive to many teachers and to the struggling colleges in our Atlantic provinces. "You see, to accept such an endowment would be for me to go straight back to what I protest against. The custom of schools and colleges supplying everything

for the pupil is a form of altruism that has its serious drawbacks. The biggest and best part of life lies in supplying yourself with the things you need. All the capital now in the Roycroft shop has been made by the concern."

In writing on "Girls and their Education," Mr. E. S. Martin, in Harper's *Bazaar*, suggests that after a girl's education has come to the point where specialization begins, or when she becomes absorbed in intellectual work, there is a risk "not that a girl may know too much to marry, but that during the years when marriage is best, and easiest achieved, she may be so busy with other concerns as to miss meeting the man whom she ought to marry." Does this dreadful possibility ever present itself to our young lady teachers?

What is the "dead-line" of teachers, or at what age are they unfit for service? Is it determined by age? A leading daily paper in discussing this question assumes that it is. This is a mistake. Some teachers may be dead at twenty, some at forty, some at sixty. It is scarcely a question of age.

A Lesson on the Wind.

Ask the children how they can tell which way the wind blows. They will answer, "We can tell sometimes by the way the trees bend; by the way we feel the wind when we are out in it," etc. "The weather-vanes tell us." Let children draw a weather-vane that they have seen. This verse will suggest a picture:

There was an old weather-vane high on a shed,
The wind came a-courting and turned his head,
And all it could utter for lack of a mouth
Was, East and West and North and South.

—*Mary Mapes Dodge in Scribner's.*

Suggest to the minds of the children some of the good things done by the wind. It scatters the seeds; it dries the clothes; it turns the mill; it sails the boats; it flies the kites, etc. Reserve a few minutes at the conclusion of the talk for the children to make a summary telling something of the good the wind does.—*Primary Education.*

A teacher must be firm, sometimes severe, but before the school is dismissed she must be so cheery, so genial, so hearty, that the discords shall be forgotten. I like the Canadian idea of putting the "opening exercises"—at the close of the day, that truth and a song may be the day's benediction.—*Dr. A. E. Winship.*

Canada Jay (*Perisoreous canadensis*).

By R. R. McLEOD.

There is no bird acquaintance of mine that has so many common names. Aside from that of Canada Jay, he is known as "Moose Bird, Dumb Jay, Camp Robber, Whiskey Jack." He belongs to a sub-family set apart from the crow group for the accommodation of jays and magpies. This Canada Jay is a common resident in Canada from ocean to ocean. He is a bird of the deep evergreen forests, of isolated settlements near such localities. Almost every person who reads this article knows by sight the brilliant noisy bluejay, but this less conspicuous cousin may need an introduction, so here it is: Length from ten to eleven inches, or the size of a robin. All the back, wings, and tail a dark slate, back of the head, neck, and crown much darker; forehead, throat, and almost around the neck dull white, rest of under parts ash, somewhat lighter than above, eyes large and black, bill short with tip of upper mandible extending a trifle over the under mandible, tip of tail whitish, feet dark. The whole plumage very hair-like, due to a lack of webbing; or interlocking of the barbules.

We have no other bird nearly resembling this species, so here is description enough to identify it even at a distance of a few yards. Its manner of flight is also a good mark for identification. They do but little more than make a scaling short journey from tree to tree, a few feet apart; one never sees them started out to go from hilltop to hilltop as we may see with bluejays and many other birds.

There are four geographical varieties of this species, and they are to be found in crossing the continent from Vancouver Island to Nova Scotia, but the habits are about the same. The differences are to be seen in darker colors, lack of white forehead and whitish tail-tip, and a little larger bird in Colorado region. I have made the acquaintance of this species from Nova Scotia to Colorado, and have always found the birds very tame and full of curiosity that goes ever with marked intelligence.

They have a decided preference for fresh meat, with a marvellous keen sense of smell to locate it at long range. One may travel all day in the soft-wood forests and neither see nor hear one of them, but a steak will not be long broiling or the skin taken from a deer or any other game before the woods will not lack for these hungry creatures, that will come within six feet of a person in order to secure a bit of this food. They are always very social in

their habits, and very rarely will a lone bird be found. A flock of them will remain about a lumber camp or a miner's cabin all the year round, where they are in great luck to have plenty of food without even the effort to look for it. Bluejays are fond of oak-nuts and beech-nuts, and in the fall and winter depend greatly upon them, but this Canada Jay passes them by without notice. Like other species of this family he is a pitiless marauder, coming down on the nests of other birds that he can overmaster in a fight. Either eggs, or young will answer his purpose. All the year he remains with us, and during the coldest months is often reduced to sore extremities for food. I have shot them when they were but little more than skin and bone, and feathers. They are close observers for nests of caterpillars, wherein they can get butterflies and moths in the making. The last one that I looked into had in his stomach the remains of a very small green snake, and the seeds of the common elder berry.

The sub-family of jays and magpies is noted for fine plumages of blue, black and white especially, but here in the Canada Jay we have an exception that is worth more consideration than we have space to give for that purpose. There are several reasons for believing that the first feathers that ever appeared in the world were of some dark shade. They were worn by a lizard-like creature, and "fine feathers that make fine birds" were almost of a certainty long delayed in their coming. Our jay, under consideration, has the old-fashioned plumage, without bars or stripes or crest; a plain quakerish garb that much belies his conduct. No other jay has made a home in such high latitudes. Brilliant plumage in the midst of frost and snow would be a severe handicap, hence we find in that region white owls, white grouse, white bears, white hares, white foxes, (so called blue foxes) and an absence of bright colors in creatures that hunt and those that are hunted. It is true that our bluejay overlaps the territory of the Canada Jay, but nevertheless he is not "to the manner born;" he is a southern adventurer that has pushed his way with audacity and wit into a climate in winter that calls for all his resources to keep alive.

The most interesting feature in our Canada Jay is the habit of nesting in March, and early April, while yet the ground is covered with snow. Such conduct is indefensible from rational grounds. The difficulties are greatly multiplied at that season when food is scarce and of but little variety, and the care of both eggs and young in cold storms, must be a hard drain on the parent birds. I think the explana-

tion of this singular conduct is to be found in the past history of the species, or especially our eastern variety. Much farther north in the Hudson Bay region the Snowy owl nests while yet the snow is over all the land, and this secures the growth of the young bird before the short summer has given place to winter again. The Alaska variety of the Canada Jay is obliged by the brevity of the warm season to do the same. If our eastern variety at some stage of its history was compelled to build in this inclement weather during thousands of years, it would continue in that way, although the necessity no longer exists.

It is no ordinary find to secure the nest and eggs of this bird. Two of them have fallen to my share in



thirty years. One of them was placed high in the crotch of a hemlock, the other was built in the top of a small fir tree that grew near a dwelling house, from which the birds were observed to carry bits of string, and thus their secret was betrayed. The nest is made for cold weather, of great bulk, and thickness of bottom and walls. The materials used are quite varied: small twigs on the outside and then a good share of the trailing lichen (*Usnea barbata*) to be found on coniferous trees; vegetable wool from the stalks of swamp ferns, bits of hornet's nest made up the principal portion of the structure. Eggs, a pale gray, finely dotted with specks of light slate, especially on the larger end. It will be inter-

esting to note the resemblance of this jay to the chickadees, especially the plainer species, the Hudsonian chickadee, to be found rather sparingly in New Brunswick and Nova Scotia, but has a more northern range than the black-capped chickadee. These are surely related to the jays, as they are often but reduced copies of the larger birds.

A Puzzle.

I recently came across the following arithmetical puzzle, which may afford some amusement. Suppose you wish to know the month and year of one's birth, give him the following problem to solve: "Take the number of the month of your birth, double it, add 5, multiply by 50, add the year of your birth, using only the last two figures in the number of the year. Now add 112, take away 362, and give me the result." It will be found that the two right hand figures of the result will give the year of birth, and the remaining figure or figures will give the month.

For illustration: Suppose one was born on the 12th of October, 1875. His calculation would give the following figures, October being the 10th month, 10, 20, 25, 1250, 1325, 1437, 1075. The 75 stands for the year of his birth and the 10 for the month.

It will interest the young arithmetician to find out why this is so; it is not difficult. And when he has found the secret, he will find that he can vary the exercise, in more than a score of ways.—*School and Home Education.*

The Coming Arithmetic.

I believe that the coming arithmetic will embody at least some of these principles:

First, it will contain several lines of work strongly defined and very thoroughly and carefully developed.

Second, this work will be so arranged that the pupils will be investigating most of it all the time.

Third, that as the pupil advances he simply takes up harder phases of the work he has studied from the first.

Fourth, the subject matter will be so written that it will cause the pupil to investigate and think all the time and will have such form that it will be impossible for him to memorize it.

Fifth, that all rules, definitions, headings, etc., will be left out of the book entirely.

Sixth, that very much of the matter that we find in the books at present will be omitted, and some that has received very shabby treatment in the past will be thoroughly developed.—*John L. Lyle.*

DRAWING—No. 2.

By F. G. MATTHEWS.

NOTE.—To avoid repetition references will frequently be made to figures appearing in preceding numbers. It will be well, therefore, for readers who wish to follow these articles, to keep back numbers by them.

2.—VERTICAL RECTANGULAR PLANES.

On referring again to Fig. 1 it will be noticed that the vertical lines, of which there are a great number, are all perpendicular to the lower edge of the picture. This is a characteristic of all vertical lines, if the observer be at a sufficient distance to see the whole line at a glance. This important reservation should be noted now, though explanation will be made later on, when attention will again be drawn to it. At present, however, we are dealing with short vertical lines which can be readily seen at a glance.

For the first drawing of a vertical plane, a book may be placed on end, and one face of it drawn. (*a b c d* Fig. 10). The student should take the cut cardboard again, and, holding it upright, move

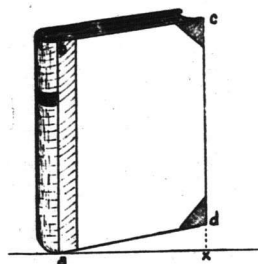
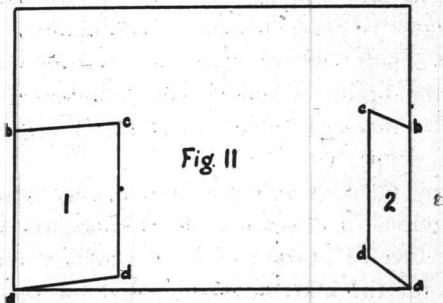


Fig 10

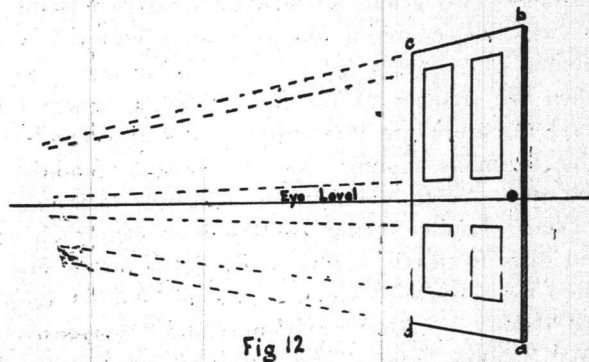
it right and left, until *a b* lies along the side of the hole, *a* touching its lower end. If the book be facing the observer *a d* will be found to lie along the lower edge of the hole. Here, however, the book is turned away at a slight angle, consequently *d* is seen as in Fig. 11, 1. The position of *c*, which may be above or below *b*, should be noted by reference to *b*, and *c d*, drawn parallel to *a b*. The book may now be turned at a sharper angle, and the positions of the points *a b c d*, again noted on the cardboard. On transferring each result to paper, it will be seen that in the second case *a d* is shorter, and will make a wider angle with the ground line than before, causing the book to appear narrower. This effect is exactly the same as in the blocks of buildings on the right and left in Fig. 1. Although of the same length in reality, yet in the picture, the one on the left appears much broader than that on the right, and the vertical lines marking the outlines of the windows are consequently much more crowded on the latter.

To draw the face of the book without the aid of the card, first fix the point *a* and draw *a b* vertical. If the pencil be now held alternately horizontally and

vertically in line with *a* (as in Fig. 7), no difficulty should be found in judging the direction of *a d*. The same may be done at *b* to find the direction of *b c*. These lines should be sketched in lightly, in such a way, that, if produced, they would meet at the eye level. To get the apparent length of *a d* imagine *c d* produced to meet the ground line in *x*. (Fig. 10). Then by comparing *a x* with *a b* the point *d* can be fixed and *d c* drawn parallel to *a b*. When the hand has to be moved in comparing lengths of lines, care should be taken to keep the pencil at the same distance between the eye and the object.



The tracing plane may with advantage here be used to confirm the above results, and practice can be had with various perpendicular planes. A partly open door forms an excellent subject, as the horizontal lines appear to go both up and down to the eye level. The nearest vertical line should be drawn first at any length to suit the size of drawing required. After placing a mark on the door on a level with the eye, note the proportion of the door above and below



this mark. For this, use the pencil in the same manner as in the division of a horizontal line in Fig. 8. Now divide the vertical line on the paper in the same proportion, and through the point of division, draw a horizontal line to represent the eye level. As in the exercise with the book, note the direction of the top and bottom of the door, and draw lines to represent them, producing till they meet on the eye level. (Fig. 12). If they do not meet on the eye level

it is a sure sign that some error in judgment has been made, either in the position of the eye level, or with the lines representing the top and bottom of the door. When correct, proceed to gauge the width of the door as in Fig. 10, and draw the upright *c d* parallel to *b a*. Before proceeding to draw the panels it will be well to note some effects of foreshortening. These will form the opening of the next contribution.

ERRATA.—In last month's article (E. C. G., Fig. 4.2) at bottom of first column, page 131, should read (E. F. G., Fig. 4.2).

Perceptive, in second line on page 132, for *perspective*.

An excellent exercise in language is to read to the children a concise and well worded set of directions for playing some familiar game. The teacher can easily write one for herself if need be. The children may then construct the plan on which these directions were arranged. Perhaps it may read something as follows:

Paragraph I. Introduction.

1. Kind of game.
2. Materials used in playing.

Paragraph II. Body.

How the game is played.

Paragraph III. Conclusion.

Why the game is interesting.

Using this outline as a model, have the class describe some indoor game, using their own judgment about the advisability of an introduction or a conclusion. The following games are easy subjects:

Blindman's Buff, Authors, Ping Pong, Croquet, Foot Ball, Golf, Twenty Questions, Charades, Hunt the Slipper, Base Ball, Basket Ball, Tennis.—*Popular Educator*.

Find an interesting short story in an old reader or book with which the children are not familiar. Cut it out and mount each paragraph on a small piece of cardboard. Number the pieces in order. When the children are tired of their regular reading lesson, pass these cards quickly. Give two minutes to look over the card. Then let number one read. Succeeding numbers will read without their number having been called, thus keeping the thread of the story. This quickens interest, promotes alertness, and aids sight reading.

Herbert Spencer, the great English philosopher, is dead, in the 84th year of his age. His father and grandfather were teachers. His great work on Education has been translated in nearly all the principal languages of the world.

Create a Taste for Literature.

A. B. MAGGS, PRINCIPAL OF GRAMMAR SCHOOL, SUSSEX, N. B.

One test of the efficiency of a school is that it shall inculcate in the young mind a liking for the works of good authors,—thus quickening perception of what is true and beautiful, admiration of noble conduct, the sense of justice, love of country,—in short, that it shall, little by little, open up a world of delight. Over and above the hours for work and legitimate sport, there are hours which boys and girls will spend in idleness, or worse, if they have not the taste for reading, or cannot discriminate between good literature and trash. I think that our schools have yet a good deal to learn about the best ways of securing these happy results. Boys and girls are obliged to spend time in other studies which they might better spend in the study of their own language and the great works written in it. Our school curriculum deserves to be criticised for giving too much time to arithmetic, geography, and minutiae in natural science, and too little to English and modern languages. Why should a pupil be required to dissect flowers and study the properties of detached mineral specimens for five successive years of his school life? At the end of all that time is he either a botanist or a mineralogist, or anything approaching it? The point that I wish to make plain is that formal botany and mineralogy belong to the province of the technical school, or to a special high school scientific course. In Grade VII they are not fundamentally educative, as are reading and English grammar and history. Natural science may usurp, but it never can properly fill the place of the English branches. The time consumed by it is altogether out of proportion to its value. I think I am safe in saying that from the seventh grade up the time required to cover the science course is more than can be allotted to any other one subject. The schools of New Jersey and Massachusetts are generally regarded as progressive, and there it is rare that the study of botany or chemistry is pursued for more than a year of the high school course; while with us they are studied every year. Another mistake in our curriculum, to my mind, is the hampering of the high school course with arithmetic and geography. You would suppose these branches to be the meat and drink of education, to see how they are clung to till the bitter end. Elsewhere the pupil must show a fair working knowledge of them before entering the high school, and then no further time

is spent upon them. Do you wonder that the Massachusetts high schools so far out-rank ours in English literature and composition, in Latin, French and higher mathematics? We carry too many subjects at once, and thus dissipate our energies. Our second year high school pupil, if he takes the full course, has twelve classes. In Montclair, N. J., he has only six in the Latin-scientific, and five in the classical course. In New York City he has seven at the most. Do you not see that our boys and girls of the grammar and high schools are working at a tremendous disadvantage? They lose the charm and stimulus of novelty, for a subject once begun is never finished. Arithmetic is pursued to a point where it becomes actually deadening to the brain. Chemistry and botany are protracted *ad nauseam*, and history and literature curtailed in proportion.

But my purpose was not so much to attack mistaken notions of education as to emphasize the fact that the love of literature and the taste for reading is good for the individual and good for the nation. There is no need to make any forced connection between literature and life. Sir Henry Irving said recently: "An incalculable benefit would be conferred on the people if they could be induced to listen to or to read Shakespeare and other imaginative works." We are not doing what we might in our elementary schools to draw out this latent literary sense. If we were not so bound to prescribed readers, which remind one of Gratiano's reasons—"two grains of wheat hid in two bushels of chaff,"—we might discover that children are capable of enjoying good books at an early age, when the chances of forming in them a taste for good literature are the brightest. It is quite possible to make a long list of works by standard authors—Scott, Goldsmith, Hughes, Macaulay, Dickens, Lamb, Irving, Longfellow,—which boys and girls from ten to fifteen will be as much interested in as those of younger years in "The Sleeping Beauty," "Alice in Wonderland," Stevenson's "My Shadow," and "The Land of Story-Books," or Field's "The Rock-a-By Lady from Hush-a-By Street." I well remember the stroke of good luck by which, at the age of thirteen, I was taken into a class reading Quentin Durward, and how from that time dated my liking for Scott. A youngster will not like an easy book if it is stupid, whereas he will read eagerly a somewhat harder one if it is interesting. Among my first good reading, about the age of ten, I vividly recall Southey's "Life of Nel-

son" and Rollins' account of the Persian Invasions and the Punic Wars in his *Ancient History*. You may say this reading was superficial. Perhaps it was, but there are incidents and expressions from these books which I shall never forget. There are noble and beautiful passages in the classics of our language which we ought to know, and which we should know, if they had had a chance to stick in our memory before we were fifteen. Do not hesitate to put into a boy's hand a book which may appear a little beyond his years, if only it embodies interest, a good moral, and style.

We so often hear the excuse: "No time for reading." Hear what Andrew Lang, perhaps the most widely gifted man of letters in the English-speaking world has to say to that. "Pause, O youth or maiden! before you accustom your lips to this fatal formula: I have no time to read. You have all the time which, for you, exists, and it is abundant. What are you doing with it—with your leisure? Mainly gossiping. Our modern malady is gregariousness. We must be in company, chattering. Observe and take warning by the dog. He is so much the friend of man that, if shut up from human society, he often neglects his natural way of passing his time (scratching himself) and utters discontented howls, disturbing the vicinity. Human beings, for the moment destitute of company, do not howl, indeed, but they do not read—they avoid the instructing and amusing society of books. To be always with others, always gregarious, always chattering, like monkeys in tree-tops, is our ruling vice, and *this* is the reason why we have no time to read, and why you see so many people pass their leisure, when alone, in whistling or whittling. They have time to whittle." And again: "It is not time, but taste and interest, that you congenitally lack. Given these, given the love for the good society that lives in literature, you will soon discover ways of emancipating yourself from society which is not so excellent. Some men have risen at five to read and write—like Scott, when his whole day was passed under the public eye, in law courts, in society, in country houses. Others, like Macaulay, have managed to read in the streets, automatically steering themselves safely, to the wonder of mankind. This plan I cannot personally recommend, for the last time that I tried it, I encountered a lamp-post, which knocked in my hat, and, to a certain extent, which may be variously estimated by critics, damaged my head."

Mr. Lang gives a list of people who, with some exceptions, never read books: novelists, Scotch pro-

fessors, schoolmasters, booksellers, publishers, schoolmistresses, actors, stockbrokers, men in commerce, reviewers, and hunting-men. This is rather hard upon teachers, but is there not too much truth in what he says? Do we exact scholarship of ourselves, or do we rather trust to our position to give us a reputation for knowing things? If it is the latter, we are doing others a great injustice, and ourselves a still greater. Let us be lovers of books without being bookish, just as we may be lovers of nature without being botanists.

"Let knowledge grow from more to more,
But more of reverence in us dwell,
That mind and soul, according well,
May make one music as before."

English Literature in the Lower Grades.

BY ELEANOR ROBINSON.

CHRISTMAS POETRY.

No poetry but the best is good enough for children. The most beautiful poems that have been written, so far as I know, on the subject of the birth of Christ, are Milton's "Hymn on the Nativity," and Ben Jonson's "Christmas Carol." It is not only the learner that needs the best that poetry can give. On such great subjects as this only great poets can speak worthily. Childish jingles and mere prettinesses may be tolerated when they have to do with ordinary topics, but only a grand and stately beauty is fitting to clothe the thoughts that the Christmas season brings.

Year after year, as the time comes round, I set my pupils to learn one or both of these poems, and those who have learned them before, repeat them, refreshing their memories. I say advisedly, "Set them to learn," for I do not "teach" the poems to them. A direction as to the main thought of each, some little help with words or constructions, whose meaning has changed, is all that I think necessary. The lines once memorized, and the literal meaning of the words firmly grasped, let the full beauty of the thought come gradually; it can come no other way. The memory holds fast the words, like the bud of a flower which will unfold in its own time.

Jonson's Christmas Carol has for its central thought the comfort and joy of mankind at the gift that God has given. The angels rejoiced over it, the shepherds did the like. "Can man forget this story?" Milton's thought goes further; it contains not only wonder and joy, but also gratitude. "Shall not thy sacred vein afford a present to the

infant God?" It is the thought that underlies the gift-giving, the care for the poor and helpless, the music, the decorations,—all the circumstances with which Christmas is kept.

I SING THE BIRTH WAS BORN TO-NIGHT.

I.

I sing the Birth was born to-night,
The Author both of life and light;
The angels so did sound it.
And like the ravished shepherds said,
Who saw the light and were afraid,
Yet searched, and true they found it.

II.

The Son of God, the Eternal King,
That did us all salvation bring,
And freed the soul from danger;
He, whom the whole world could not take,
The Word which heav'n and earth did make,
Was now laid in a manger.

III.

The Father's wisdom willed it so,
The Son's obedience knew no No,
Both wills were in the stature;
And as that wisdom had decreed,
The Word was now made Flesh indeed,
And took on Him our nature.

IV.

What comfort by Him do we win,
Who made Himself the price of sin,
To make us heirs of glory!
To see this Babe all innocence
A martyr born in our defence,
Can man forget this story?

—Ben Jonson, 1573-1637.

Ravished = transported with joy.
"Whom the whole world could not take," = whom the whole world could not captivate or charm.
"In one stature," = one and the same.
Note that in "The Word which heav'n and earth did make," *heav'n and earth* is the *object*.

HYMN ON THE NATIVITY—INTRODUCTORY.

I.

This is the month, and this the happy morn,
Wherein the Son of Heav'n's Eternal King,
Of wedded Maid and Virgin mother born,
Our great redemption from above did bring;
For so the holy sages once did sing:
That He our deadly forfeit should release,
And with His Father work us a perpetual peace.

II.

That glorious form, that light unsufferable,
And that far-beaming blaze of majesty,
Wherewith He went at Heav'n's high council-table
To sit the midst of Trinal Unity,
He laid aside; and, here with us to be,
Forsook the courts of everlasting day,
And chose with us a darksome house of mortal clay.

III.

Say, heavenly muse, shall not thy sacred vein
Afford a present to the Infant God?
Hast thou no verse, no hymn, or solemn strain,
To welcome Him to this His new abode
Now while the Heav'n by the sun's team untrod
Hath took no print of the approaching light,
And all the spangled host keep watch in squadrons
bright?

IV.

See how from far upon the eastern road
The star-led wizards haste with odours sweet;
O run, prevent them with thy humble ode,
And lay it lowly at His blessed feet;
Have thou the honour first thy Lord to greet,
And join thy voice unto the angel quire,
From out His sacred altar touched with hallowed
fire.

John Milton, (1608-1672).

The "Hymn on the Nativity," to which these stanzas are the introduction, was written at Christmas, 1629, when Milton was only twenty-one, and is the first important poem that he wrote.

Words and phrases needing explanation:

Redemption = ransom.

The holy sages = the prophets.

"Our deadly forfeit should release" = that he should remit, or cause to be remitted, the penalty of death to which we were liable.

Unsufferable = the old use preferred the English prefix *un* to the Latin *in*. Shakespeare says *unhospitable*. *Unsufferable* = not to be borne.

Wont = was accustomed.

"And chose with us." *With us* must be taken in connection with the object, not with the verb.

"Say, heavenly muse, shall not thy sacred vein." The poet here calls upon the spirit who inspires his poetry. Compare the first few lines of *Paradise Lost*.

Afford = give, present, without any reference to the means of the giver.

The star-led wizards = the wise men from the East. *Wizard* was originally spelt *wisard*. Compare the affix *ard* in drunkard, etc.

Prevent = go before — with no sense of hindering. Compare "We pray thee that thy grace may always *prevent* and *follow* us" in the English prayer-book.

Quire = choir. So spelt in the writings of the time. Compare the prayer-book. "In quires and places where they sing."

"From out his secret altar touched with hallowed fire." = Touched with hallowed fire from out his secret altar—the reference is to Isaiah vi, 6 and 7.

Gray's "Elegy" will be the subject of the January paper.

Make a living, but remember there is one thing better than making a living—making a life.—*W. E. Russell*,



Our Christmas Picture.

The picture on the page just before this is from a painting by Gerard van Honthorst (pronounced hone-torst) born at Utrecht, Holland, in 1592, and died in that city in 1660. He was commonly called Gherardo della Notte (Gerard of the Night) because it was his habit to represent interiors of churches, courts and rooms lighted up by lamps or candles. He showed great skill in reproducing scenes, illuminated by a single candle; and the faces lighted up in the picture, gazing in delighted adoration upon the Child, form a beautiful study.

My Christmas.

My school Christmas was such a success last year, and so great an improvement on all my previous efforts, that I would like to pass on the results and means of obtaining them.

External circumstances were very discouraging, for the schoolroom is the older of two in a very old building, and has poor blackboards, poorer walls, a sway-backed ceiling, and warped floors.

The forty-seven single seats must accommodate sixty pupils of the class that live in the street, and regard home as a lodging house and restaurant.

Friday afternoons, which we always devote to some special work, are gala times to the children. This first December Friday the little people came laden with bunches of fir and ivy, cedar and pine, and our Christmas work began.

Each child was furnished with a long green thread, a bunch of green, and a long spray of ivy. Even the tiny tots could tie the fir along the ivy stems, and the cries of satisfaction and admiration that greeted the resulting "ribbons" were good to hear. With the help of the largest pupils, these "ribbons" were hung around the clock and festooned along the walls. A frame of fir and cedar was interwoven for the Christ-child picture.

Saturday a tiny tree about four feet high was set up at one end of the kindergarten table ready for Monday. The arrival of the first boy was proclaimed by his discovery of this and the ribbons in place. As the children came in their exclamations were very pleasant to hear.

Our busy work for this week included tree decorations—chains, cornucopias, and many other simple things that can be made from bright papers.

Almost every day some new decoration was

brought in by the children, to be loaned or given to the tree. Early in the week the question of the final disposal of our pretty things had been discussed, and the children had decided to give them to the Orphan's home Christmas tree.

When Friday afternoon came again we began presents for the mothers. These were card baskets, shopping-lists, spool boxes, or cachets, according to the child's ability.

On the afternoon of the third Friday we made shaving-paper cases, blotters, and toothpick holders for the fathers, and began to feel quite weighted down with Christmas secrets.

Our exercises were to be held the Friday before Christmas, and our language periods for Wednesday and Thursday were spent in copying notes of invitation, asking the mothers to visit us on that day. They came twenty-five strong, in spite of rain, sleet, wind, and snow, and seemed to have a good time.

We sang our Christmas songs, recited our "memory gems" and "pieces," had a Christmas story, and gave out our presents.

The effort through all our month's work was to eliminate "I" and substitute "we." The children entered heartily into the exercises and seemed to lose the spirit of self-consciousness, which spoils most children's exercises.

Yes, it cost something; about three dollars in money and hours in preparation. Did it pay? It certainly did, for a happier set of parents and children have never been in that old schoolroom, I am sure. Would I do it again? Yes, and more.

Saturday morning, after stripping the tree and packing its treasures, I laboriously tore the little tree limb from limb and burned it. I could not bear to have the symbol of so much work and pleasure kicked about the yard or street until June, and there are few locks on this school property.

Our Christ-child picture still adorns our walls, our Christmas greens are faded and gone, and we have put by our Christmas songs and mottoes, but the spirit of doing for others is not entirely dead, and I hope never will be in the little hearts so susceptible to good influences.—*Clara Frink, in American Primary Teacher.*

Not the good thing we accomplish, but the better thing we plan,

Not the achievement, but ideal, is the measure of a man

—*Samuel V. Cole.*

Quotations for Christmas.

Awake, glad heart! get up and sing!
It is the birthday of the King.—*Vaughan.*

I heard the bells on Christmas day
Their old, familiar carols play,
And wild and sweet
The words repeat,
Of "Peace on earth, good-will to men."
—*Longfellow.*

For they who think of others most
Are the happiest folks that live.—*Phoebe Cary.*

True happiness, if understood,
Consists alone in doing good.—*Somerville.*

For little children everywhere
A joyous season still we make;
We bring our precious gifts to them,
Even for the dear child Jesus' sake.
—*Phoebe Cary.*

It is the Christmas time:
And up and down 'twixt heaven and earth,
In glorious grief and solemn mirth,
The shining angels climb. —*D. M. Mulock.*

At Christmas-tide the open hand
Scatters its bounty o'er sea and land,
And none are left to grieve alone,
For love is heaven and claims its own.
—*Margaret E. Sangster.*

At Christmas play, and make good cheer,
For Christmas comes but once a year. —*Tusser.*

Blow, bugles of battle, the marches of peace;
East, west, north, and south, let the long quarrel cease;
Sing the song of great joy that the angels began,
Sing of glory to God, and of good-will to man!
—*Whittier.*

POEMS FOR CHRISTMAS.

- A Christmas Carol.—*James Russell Lowell.*
Christmas Bells. Christmas Carol.—*H. W. Longfellow.*
Christmas Hymn.—*Phillips Brooks.*
Christmas in the Olden Time.—*Walter Scott.*
Christmas.—*Alfred Tennyson.*
The Night Before Christmas.—*Whittier's Child Life.*
A Christmas Carol.—*Margaret E. Sangster.*
Christmas Eve.—*Mrs. Dodge's When Life Is Young.*
The Holly.—*Eliza Cook.*
The Little Christmas Tree.—*Susan Coolidge.*
Piccola.—*Celia Thaxter.*
Santa Claus and the Mouse.—*Emile Poulsson.*
Green Holly Boughs. Christmas Hymn.—*Eleanor Smith's Songs for Little Children.*
Christmas Everywhere.—*Phillips Brooks.*

"What does the poet mean when he speaks of 'the embers of the dying year?'"

"Why, November and December, of course."—*Brooklyn Eagle.*

Mineralogy and Geology in Schools — No. III.

L. A. DEWOLFE.

Last month I suggested teaching that feldspar contained, among other things, *calcium* and *sodium*. By decomposition these give some of the salts of the ocean, sodium giving the best known, or common salt. Here teach the formation of salt beds such as those in the mines of Austria and other countries. Explain that the calcium united with carbon dioxide (a gas which all pupils should know about) forms limestone. Air and carbon dioxide, with water, will thus dissolve out the calcium, and form limestone in solution, which in turn washes into the ocean. Sea animals use it to form their shells. (Test a sea-shell for lime). The animals die and the shells collect to form ooze, coral, shell limestone, etc., according to the kind of animal. This shell mass may re-dissolve and be re-deposited in crystalline form, cemented by its own material. Hence we may find all stages of shell limestones, calcite (Iceland spar), and compact limestone, or marble. In this connection, study dolomite, which is magnesian limestone. Teach, too, the formation of caves and the growth of stalactites and stalagmites. Let the children now attempt to explain the sharply uneven surface often seen in limestone and gypsum countries.

Do the caves of Kentucky, of New Brunswick and Nova Scotia, mean more to your children after they have learned this lesson? Do they know any more about the salt springs at Syracuse? or in Kings County, New Brunswick?

At this stage the child should be acquainted with granite, quartz, feldspar, mica, sandstone, quartzite, shale, slate, limestone and gypsum in their various forms. Excursions to the beach or to a neighboring brook will now prove valuable. Call them picnics, if you like. Take along a hammer to break specimens, for a weathered surface does not always show the true nature of the rock. The pupils will recognize many of the rocks named above. Granites and quartz will doubtless predominate in many regions. Why? Would slate stand the wear so well? On the lake shore notice boulders farther up on the beach than the water ever rises. How did they get there? Does ice ever push up farther than the water goes? Does it expand as it freezes? Are the boulders in the brook, or on the beach, or over the surface of the land often different from the bed rock in the same locality? How did they get there? This introduces the subject of glaciers,

The child has probably heard of the glaciers in the Alps, in Greenland, and the Rocky Mountains. After a few talks on their movements and effects there, give some evidences that Eastern America was once the scene of similar glacial action. Show your class striation marks on exposed surfaces of bed rock. If opportunity offers, see whether they are equally well preserved on different kinds of rock. Note their direction. Do you sometimes find two sets of such lines crossing each other? At what angle? Compare the general direction of these striæ with that of lakes and hills, if any exist, in the neighborhood. They will probably coincide. If not, perhaps you can find some local cause for the difference. Now referring to the map, have the pupils compare these directions with those of the Bay of Fundy, St. Lawrence River, Big and Little Bras d'Or, and the bays of Eastern United States. If the child can be shown that all these harbors have probably been gouged out by glaciers, he will know the gouged out material had to go somewhere, and the mystery of the gravel hills and drift boulders is, in part, at least, solved. The glacier did not extend farther south than about Chesapeake Bay, or the latitude of Philadelphia, hence south of that, deep harbors are few. It has been found that Eastern America has undergone depression since the Glacial Period, which allowed the gouged valleys to fill, or partly fill, with water, forming the harbors of which we speak.

Following the geological story a step farther. I should teach the process by which lakes gradually fill with material from the mountains and forests until they become swamps, bogs, and finally level fields. Similarly teach the formation of deltas. Numerous illustrations of these changes are visible everywhere. Lead the child to see them. Very soon he will see them for himself. Storm beaches, shutting back coves from the sea, are interesting to study. They can be found in different stages of growth, and the coves in different stages of filling, until finally they become shore swamps. In carboniferous rocks, vertical trees, now fossilized, show good proof of such filling up. Diatomaceous earth (tripolite), so much used for polishing powder, making dynamite, etc., should be taught here. So should the formation of coal. Collections of fossils, so easily got in carboniferous sandstone and shale, are now necessary. Comparison of fossil calamites with our modern Horsetails (*Equisetums*) coupled with the lesson about large tree ferns of Brazil, is not beyond any ordinary pupil. These

lessons, if properly taught, show the material world in a new light. The bogs along the roadside tell a new story, and peat becomes something more than a mysterious product, common only to Ireland. Petrified (or silicified) wood is no longer an enigma. The boy's eyes are opened, and looking for further evidence of these facts and theories he soon begins to make discoveries for himself.

What Teachers' Unions Hope to Do.

R. ERNEST ESTABROOKS, PRESIDENT N. B. TEACHERS' UNION.

Within the last year a widespread feeling in favor of a Teachers' Union has pervaded the Maritime Provinces; or, perhaps it would be more correct to say, that this feeling, which has existed for a long time, has at last found expression. For many years it has been recognized that teachers are underpaid. By individual efforts they have done their best to overcome this. They have appealed, first to one power, and then to another, for better remuneration, to be met at every turn with the same reply: "We know you are working for less than you should receive, but we can get others to do the same work for the same pay, and we will give no more." Teachers, recognizing the tendency of school boards to drive hard bargains, have underbid one another until at last they are the most poorly paid class of laborers in our province. At this period of prosperity, one of the brightest our country has ever enjoyed, teachers are receiving practically the same number of dollars and cents per annum that they did ten years ago, notwithstanding the fact that in these same ten years the wages of every other craft and profession has advanced with the tide of prosperity, and that the cost of living has increased over twenty per cent. Consequently, teachers' salaries have not more than three-fourths of the purchasing power they had ten years ago; and from a financial standpoint teachers are in a lower relative position when compared with other wage earners than formerly. Besides, the demands made upon teachers increase year by year. They must dress better, read new books and follow up-to-date ideas, attend colleges, spend their vacations in travel or at a summer school, so as to be able to do better work, and in many ways take a higher position in society. That is, they must invest more capital and do more work and accept less pay. Is it any wonder so many men and women abandon the profession? Is it any wonder that with from

300 to 400 new teachers each year many of the schools remain closed, when we consider that many of the men have to meet these conditions on less than \$300, and many of the women on less than \$200 per year?

But the November number of the REVIEW says: "The time has gone by for mere complaint about low salaries." In that sentiment those who have joined the Teachers' Unions heartily agree. They see no hope of an advance in salaries until teachers in general know their own value and refuse to accept less. To inspire in the teachers some appreciation of their own worth is one of the objects sought. When they come to realize this and are united in their demands for fair remuneration, school boards will no longer have the excuse to offer that they can get other teachers for less, and "they don't purpose to spend two dollars where one will do."

Nor is the question of salary the sole object of these unions. With better remuneration will come a longer period of service and more experience—especially for the men. They will have a greater incentive to equip themselves properly for the work. More money will enable them to procure new books, educational papers, and other helps necessary for good work. Instead of being driven from the profession, they will settle down to teaching as a life-work, and devote to it their whole time and energy. They will then be prepared to do a little "missionary work" among the ratepayers, and show them that their interests are best guarded by employing good teachers at good pay.

Many of the most advanced teachers in our province have espoused the cause and are giving it their active support. Prince Edward Island and Nova Scotia are also organizing. Already eight unions have been formed in New Brunswick, and the idea is spreading rapidly. At a meeting of delegates to be held in Moncton, December 22nd, an attempt will be made to consolidate these unions and to take such action as will enable them to do effective work in the true interests of education.

"Friendship is a beautiful and changeless thing," said the chairman of the school board. "I hope you will all cultivate and practise true friendship toward one another, children, and read the stories of the great friendships of sacred and profane history. Take the lives of David and Jonathan, Damon and Pythias, and Scylla and Charybdis for your patterns, my young friends, and you cannot go amiss."

Primary Arithmetic — No. III.

BY PRINCIPAL P. O'HEARN.

DIVISION.

Put 8 circles or squares on blackboard, separated into groups of 2 each. How many groups are there? How many 2's in 8? $8 \div 2 = ?$ $8 \div 4 = ?$

Explain \div , the sign of division.

If 1 hat costs \$2, what will 4 cost? \$8. $2 \times 4 = \$8$.

How many hats at \$2 each can I buy for \$8? $8 \div 2 = 4$.

If I pay \$8 for 4 hats, what can I buy 1 for? $8 \div 4 = \$2$.

In 1 quart there are 2 pints; how many pints in 4 quarts? 8 pints. How many quarts in 8 pints? $8 \text{ pints} \div 2 = 4$ (quarts).

In 1 yard there are 3 feet. How many yards in 12 feet? $12 \text{ feet} \div 3 = 4$ yards (4 pieces each 3 ft. long).

In 1 bushel there are 4 pecks. How many bushels in 12 pecks? $12 \text{ pecks} \div 4 = 3$ (bushels).

$2 \times 3 = 6$; 2 and 3 are factors of 6.

$2 \times 3 \times 3 = 18$; 2, 3 and 3 are factors of 18.

$2 \times ? = 6$; $3 \times ? = 6$; $3 \times ? = 9$.

If 3 is one factor of 6, what is the other? If 3 is one factor of 9, what is the other?

What are the factors of a number?

How many 5-cent books can I buy for 15 cents? $15 \div 5 = ?$ If I pay 15 cents for 3 note-books, what is the price of 1? $15 \div 3 = 5$.

(a) I had 9 cents and bought oranges at 3 cents each. How many did I buy?

Divisor.	Dividend.	Quotient.
3 cents.	9 cents.	3 times 3 cents, or the value of 3 oranges.
	9 cents.	

Remainder 0

(b) I had 11 cents and bought oranges at 3 cents each. How many did I buy, and what was over?

Divisor.	Dividend.	Quotient.
3 cents.	11 cents.	3 (oranges).
	9 cents.	

Remainder 2 cents.

(c) Divide 11 cents among 4 boys.

Divisor.	Dividend.	Quotient.
4	11 cents.	2 $\frac{3}{4}$ cents.
	8 cents.	

Remainder 3 cents.

Notice that the word *cents* is written in the divisors of (a) and (b), but that the word *boys* is omitted in the divisor of (c). Why?

The method of long division (as above) should be taught before that of short division. - When the pupils can divide accurately and rapidly by two figures, they should take up the method of short division.

Before advancing further it would, perhaps, be well to explain and have defined the terms addend, sum, minuend, subtrahend, remainder, multiplicand, multiplier, product, continued product, divisor, dividend, quotient.

Overheard at a County Institute.

"O girls! wasn't he inspiration itself?" exclaimed one of a group of teachers. It was during the intermission which had followed a masterly address at the county institute.

"Yes," replied the teacher with the tired eyes, "but I wonder how long his inspiration would last him if he were cooped up in a dingy wooden school-house, miles from all sources of entertainment?"

"I fancy he would keep it even there," suggested a calm-faced young woman. "You know 'Brave spirits are a balsam to themselves.'"

The group faced her laughingly. "Look, girls!" one exclaimed merrily. "Two years ago Katharine Johnson had nervous prostration."

"And behold her now," chimed in another. "Teacher of the hardest school in the county, and the very picture of health and happiness. Serene, rosy, and smiling, while I with but sixteen scholars am a mere shadow of the woman I was."

"My sentiments too," declared another. "Give us your secret and we'll all save a dime from our next bottle of tonic and buy you a box of Huyler's."

"To tell the truth," Miss Johnson laughed, "I've been longing to give you the benefit of my experience."

"Then please do," said one. "Our intermission is slipping, slipping fast away."

"The main secret of my improved health," declared Miss Johnson, "is that I study eight hours per week." Groans of horror greeted the announcement.

"You know my school," she continued. "Bleak, lonesome, no society, or even libraries, and a lot of big, rough boys." As there was little or no inspiration to be had from without I had to get it from within"—she hesitated, but was urged to continue.

"Please don't think me preachy or egotistical," she said with an embarrassed little laugh: "If you knew how hard it is to tell these things! I used to have an exaggerated idea of my responsibility. I

spent half of my nights worrying. Then too, I persuaded myself that I hated teaching; that my entering upon it was a mistake. I believed nature had designed me for a great personage, but capricious fate had ruined my life. At last I resolved miserably to drudge during the rest of my years, hoping for an early grave and the chance of beginning again."

One girl attempted to make a polite comment, but failed dismally.

"That year of nervous prostration—richly deserved—taught me something. I had a passion for ancient history. In my 'Castles in Spain' I was to spend years delving among the ruins in the old world; then become the 'foremost historian of the age.' Beautiful dream, wasn't it?"

The girls nodded assent.

"Now, then, confess, as I have," Miss Johnson demanded. "All of you culprits who have a dream fame shut up in your hearts—hands up!"

Half a dozen hands were raised.

"That will do," she said. "If you want to be happy, do as I did. Get a course on the subject—whether it's art, literature, or electrical engineering, and study."

"Might I respectfully ask the relation between such study and good health?" ventured the one with the black eyes.

"Certainly," replied Miss Johnson. "When I go home, tired, nervous, and discouraged, instead of dumping on the bed in a miserable heap and crying until my brain is numb, I calmly go for a walk, freshen up my toilet, eat my supper, and plunge into work. For an hour I climb the pyramids and question the mystic Sphinx. My troubled mind grows calm as I bathe in the golden afterglow of a sunset by the grand Old Nile. Then all the petty pin pricks of school are dwarfed to insignificance, before the wonders of those dead ages. I emerge, tired but happy, and ready to enjoy eight hours' sleep."

"Very ideal," remarked the one who was always saying cutting things. "But I can spend my time better planning for the moral development of the children."

A girl took up clubs in Miss Johnson's defence. "She does that without planning," she exclaimed hotly. "She has wrought wonders in that rough district. The children say it makes them good to be near her."

"But whenever do you plan the work for all those grades?" queried the fussy one.

"I am there at eight and remain until five. Then I have learned to save time in school. I used to

spend half an hour looking over spelling papers. Now I pronounce words to both classes. 'First—bread.' 'Second—alternate.' A tap of the bell brings the children to line. They pass rapidly before me, presenting papers, then go to seats to learn misspelled words, or on line to receive perfect mark."

"She has an answer for every argument. Don't try to score a point against her," said the well-dressed teacher. "Farewell, my lonesome hours of weeping, my embroidery, my novels, and my domino playing. I go to learn the art of making books. Perhaps—who knows? I may be a second George Eliot!"

"Go and do likewise, girls," said Miss Johnson. "At any rate you will be happier women and better teachers. Don't think it will detract from your teaching ability. More can be accomplished by nine intense hours of consecrated work than by twenty-four hours of fussing and fretting. The children demand your brightest, strongest, most sympathetic self. It is crime to give them less. Spend an hour a day with the study you love and you will find that,

'In your hearts are the birds and the sunshine,
In your thoughts the brooklets flow.'

"There's the bell."—*M. M. Gardner, in Primary Education.*

Spelling should be made as much as possible an automatic act of the hand. Needless attention to spelling while writing is a waste of mental power. The aim should be to develop the motor memory of the hand so strongly that it will ultimately displace both the visual and the auditory memories as a guide to the muscular movements. Spelling being largely a mechanical muscular act, success in teaching it depends chiefly on repetition and drill. The ability to spell consists not so much in *knowing* how a word *should be spelled* as in the *ability to write it correctly with little or no thought of the spelling.*—*T. M. Balliet.*

Thank God every morning when you get up that you have something to do that day which must be done, whether you like it or not. Being forced to work, and forced to do your best, will breed in you temperance and self-control, diligence and strength of will, cheerfulness and content, and a hundred virtues which the idle never know.—*Charles Kingsley.*

In the school itself, should be taught, to all children of whatever gift, grade, or age, the laws of honor, the habit of truth, the virtue of humility, and the happiness of love.—*John Ruskin.*

A Good Question.

The following, taken from an exchange, contains some helpful suggestions on the art of questioning:

"A question is an act upon the part of one person seeking to obtain an expression of thought by another, usually in words. A question may be put to one's self, in which case it sets the mind to thinking and seeking after that which is not known; but a question put to another is a thought so expressed that it not only leads him to seek and find, but to express what is asked for. This leads to the fact that it is very necessary that he who asks such questions should have very definitely in his own mind just the thing he seeks to have given in the answer to his question. Not only this, but the thought should be so expressed that it will set the mind to working to find out that which is desired. To this end, the question should be simple both in thought and expression; simple in that it should call for but one thing and the expression should be in as few words as possible, and these such as are easily understood. Of course, the question may be made more comprehensive as the pupil advances, but it should always be kept easily within his reach.

"Another requisite to a good question is that it should be definite; that is, there should be no uncertainty in the mind in seeking for the thing that is wanted. Often the teacher has in mind what he wants, but the question is so broad that a great many things may be said besides the thing wanted. For example, "What can you say of this subject?" or "What are your ideas of what has just been said?" and so on. In the first example, many things may be said; and in the second the ideas expressed may have very little to do with the subject under consideration; but "What is the form of this object?" "What is the cause of this?" "What are the relations of this to that?" etc., are definite questions, and distinctly point out what the pupil is to seek.

"The most objectionable form of the question is when it contains a part or all of the answer, or when it can be answered by simply saying "yes" or "no," or that can be answered in a single word or two. Such a form is not a question in the best sense of the term, or, at least, it is of a very low order. A good question calls forth the activity of the pupil in thinking, and requires that his answer be a complete statement of the thought he has in mind; while the other leaves him passive.

"The teacher should keep in mind the two purposes in questioning: The one is to find out exactly what the pupil knows, and his difficulties in the pre-

paration of what he is to learn; the other is to lead and assist him in his efforts to discover and express truth."

Games.

The following games can be used, with a few variations, in any one of the grades, and will be found helpful to fill in those five or ten minutes before recess, or some odd moments when a little recreation seems desirable.

A child is chosen, who steps before the class, and says: "I am thinking of an animal." In succession each child in the room suggests an animal and is answered by the first child as the case may demand.

The child who guesses the animal thought of by the leader, takes his place before the class. He, in turn, must think of something belonging to another class of objects. It is often amusing, as well as surprising, to learn a child's mode of generalization.

Sometimes the teacher must give some assistance to bring about a new line of thought. Here are some of the things to think about in a Connecting Class: a bird, a flower, a tree, a number from 1-20, a number from 50-70, a color, a great man, a coin, a day, a month, a teacher in our school, a girl's name, a boy's name, a letter, a sound, an occupation, a tool, a cooking utensil, a song, a memory gem, a city, a fruit, a vegetable, etc.

All answers must be given promptly, if child is not ready, he forfeits his chance at guessing.

SECOND GRADE.—I am thinking of solid, form, measure, something round like a sphere, shaped like a cube, shaped like a hemisphere, shaped like a cylinder, wild animal, wild flower, domestic animal, even number from 20-40, odd number from 30-50.

When played in Grade III bring in geography.

Think of a river, a city, a street, a public building, man in public office, a park, any body of water or portion of land, etc.

FOURTH GRADE.—Country, ocean, peninsula, lake, strait, isthmus, island, large river, mountain range, a river, city, a multiple of 6, etc.

FIFTH GRADE.—Think of a great general, battle, year of a great battle, state or province on the Atlantic coast, Pacific coast, city on the St. Lawrence, etc.

Another amusing as well as instructive game is to let one child in the room hum the melody of a song while the rest tell the name of the song. To train the ear let several children step into the cloak-room, choose a child to hum a well-known song and expect the children in the cloak-room to tell name of child as well as name of song.—*Adapted from Primary Education.*

CURRENT EVENTS.

Still another revolution in Santo Domingo is reported.

The several republics of Central America have concluded a treaty for compulsory arbitration of matters arising between them, which provides also that immigrants shall not be allowed to organize revolutions in neighboring republics. This, it is hoped, will assure the peace of Central America.

The annexation of Newfoundland to the United States is again talked of in the United States. So, for that matter, is the annexation of Canada, even in their senate chamber; one of the senators from Maine having recently mentioned it in debate. If Newfoundland were lost to us, with it would go an unbroken strip of the Labrador coast, similar to the Alaska strip that now shuts in our Northwest Territories from the ocean. But it is hardly supposable that the British would cede the territory, even at the wish of the inhabitants; much less when the people of Newfoundland prefer confederation with Canada.

A great work has been done by the British Government in repairing the ravages of war in the Transvaal. Seven thousand persons have been put back on their farms and furnished with the requisites for rebuilding their homesteads and resuming their agricultural pursuits; they and thousands of children who are attending the government schools have been fed for over twelve months; thirty thousand acres of land have been ploughed; and provision has been made for widows and orphans and all who are in distress. Now that the Boer is to be regarded as a British subject, no effort is spared to make him contented and happy.

It may be remembered that the Passamaquoddy boundary, as arranged by the convention of 1803, was somewhat similar. By its provisions, the boundary line was to run through the middle of the channel between Deer Island on the east and north, and Moose Island (Eastport) and Campobello on the west and south, and all the islands north and east of such line, together with the Island of Campobello, were declared to belong to New Brunswick; the deep water channel between Deer Island and Campobello being taken as the natural boundary, while the latter island was added to the British possessions solely on the ground of occupation. This convention was not ratified, but the line adopted in 1817, though not so described, was virtually the same. The evident purpose was to give both nations access to the inland waters by a navigable channel.

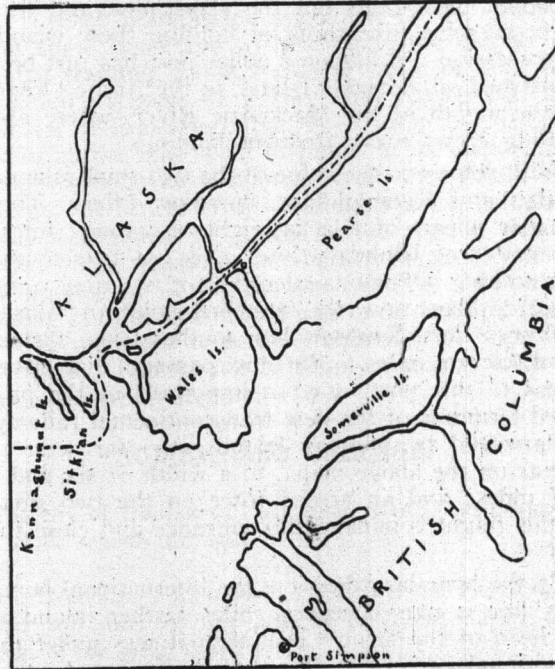
The United States having decided that it was to its interest to build and control a canal at the isthmus, through territory belonging to the Colombian Republic, and that no other nation should be allowed to build it, and Colombia having delayed the ratification of a canal treaty on the terms proposed by the United States, it seemed to the author-

ities at Washington that it was time to go on with the project without the consent of Colombia. President Roosevelt was about to say, in his message to Congress, that the United States must forthwith take the matter into its own hands, when something happened at the isthmus. On the 3rd of November some revolutionists in the city of Panama, with the subsequent approval of the soldiers and the inhabitants in general, formed a junta, or provisional government, and declared Panama an independent state. On the 6th, the United States acknowledged the junta as the ruling power in the isthmus, and ordered its warships, which had been sent there in anticipation of the movement, to prevent the Colombian government landing forces to reestablish its authority. At this, Colombia protested; but, before the protest could reach Washington, the United States had recognized the independence of the State of Panama, and had concluded with its junta a new canal treaty on terms more favorable than those refused by Colombia. By this treaty, the United States is to have perpetual control of a strip of territory through which the canal will run, with limited control over the terminal cities of Panama and Colon. Many newspapers and public men in the United States condemn the dismemberment of Colombia, though the majority support the administration. Germany has been the first of the great powers of Europe to recognize the independence of Panama, which involves its right to grant concessions and to alienate its territory.

Panama was one of the nine departments of the Republic of the United States of Colombia. Its area, comprising the Isthmus of Panama, is about twice that of Nova Scotia; and its population about equal to that of New Brunswick. Its inhabitants are chiefly Indians and half-castes, who have equal political rights with the few white people; a state of affairs which accounts in some measure for the unrest that usually prevails there, as in all the neighboring Spanish American States. Panama, a seaport on the Pacific coast, with a population of 30,000, is the chief town, and the oldest European settlement in America.

Twice before, the State of the Isthmus of Panama has had an independent existence for a short time,—once in 1840, and later beginning in 1856, when it took advantage of a strange provision in the federal constitution of that date, granting to each province the right to declare itself independent. Though there have been many changes in the Colombian constitution since then, varying from the loosest aggregation to the most rigid federal union, Panama, after it rejoined the federation, had a greater amount of home rule than any of the other provinces. This was partly due to the fact that mountains and swamps make its territory inaccessible from the mainland except by sea; and it was also due to this fact that the presence of United States war vessels could now keep the government troops from coming to put down the secession movement.

Lord Alverstone, the Lord Chief Justice of England, whose agreement with the United States commissioners settled the Alaska boundary by a majority decision, seems to have reached the conclusion that Portland Channel enters the sea by two mouths, one lying north of Kannaghunut and Sitklan Islands, the other now known as Tongas Passage, between Sitklan Island and Wales Island; and, since the latter is the more important of the two, he decided that the boundary should follow Tongas Passage.



To this the Canadian members of the tribunal, Sir Louis Jette and Mr. Aylesworth, objected so strongly that they refused to sign the award and published their reasons for dissenting. They argue that, according to the terms of the treaty which they were to interpret, Alaska was bounded on the south by Portland Channel, and could not extend farther south across waters which are admitted to be a part of that channel and include the two islands awarded to the United States. They even charge that the Lord Chief Justice, in so deciding, was making a concession to the United States for the purpose of reaching a decision.

There is, undoubtedly, throughout Canada, a feeling that we have need to beware of our aggressive neighbors on the south. Hostile legislation, continued talk of the future absorption of this Dominion into their political system, and their successful insistence upon territorial claims that seemed to us to mean an injury to Canada, with but little corresponding benefit to themselves, are the cause. This feeling strengthens the Imperial Federation movement, with the argument that the only independence we can hope to maintain is independence within the Empire to which we belong.

The dispatch of the Dominion steamer Neptune to stop poaching in the inland waters of Hudson Bay has caused the New England whalers who resort there to make a claim of equal privileges with British subjects in the Hudson Bay waters; a right which the United States fishermen now enjoy along the coast of Labrador. The claim is of more importance than at first appears; for the whalers are making more or less permanent settlements among the islands north of Hudson Bay, where there are no Canadian inhabitants but the aborigines, and they might at some time think of holding these islands by possession. A mounted police post has just been established on Herschel Island, in the Arctic Ocean, off the mouth of the Mackenzie River, where also whaling crews make frequent landings.

With respect to the value of the two small islands, Sitklan and Kannaghunut, opinions differ. They are now a part of Alaska, right or wrong; for in the matter of boundary lines it is not true to say that nothing is finally settled until it is settled right. From Sitklan, now the southern point of Alaska territory, Port Simpson lies southeasterly, distant about eleven miles. But the passage that gives access to this port, now so important as the proposed terminus of the new transcontinental railway, is narrowed by Dundas Island, (too far west to appear on the above map), to a width of six and a half miles; and an armed force on the two small islands might command this entrance and close the port.

By the boundary decision, the international boundary line is moved several miles farther inland at the head of the Lynn Canal than it was under the provisional agreement. One of the mounted police posts on the Dalton trail must be abandoned.

It is felt in British Columbia that there should be an all-Canadian route to the Yukon, and the government of that province has offered to help in any reasonable plan for building a railway to supply the need. The ocean terminus of such a railway would probably be at Kitimat, a British Columbia port far enough south to keep clear of United States territory.

Fighting still continues in the Phillipines. The Jolo campaign, just ended, in which the natives suffered heavily, is thought to have been a severe lesson to that turbulent race, and to have checked their efforts for home rule. They seem unable to realize that they are more free under United States government than they were under their native rulers.

St. Pierre and Miquelon, lying at the entrance of the Gulf of St. Lawrence, are of much greater importance to Canadian commerce than the two small islands at the mouth of Portland Channel. They are held by the French; but France does not threaten our very existence as a nation, as does the United States; and the suggestion of Senator Lodge, one of the Alaska commissioners, that the United States acquire these islands by purchase, is alarming.

Canadian newspapers now pass from the office of publication to the United Kingdom, the Bahamas, Barbados, Bermuda, British Honduras, British North Borneo, Ceylon, Cyprus, the Falkland Islands, Gambia, Hong Kong, the Leeward Islands, New Zealand, Sarawak, Sierra Leone, the Transvaal, Turks Island and Zanzibar at the same rates and under the same conditions as apply to Canadian newspapers addressed to places in Canada.

A treaty between Brazil and Bolivia settles the question of the Acre Territory dispute by placing the greater part of the territory under the Brazilian government. Brazil pays an indemnity, and cedes a certain area to enable Bolivia to have direct communication with Upper Paraguay.

New Zealand has a new tariff law which gives a preference to imports from Great Britain, and it is expected that the same preference will be extended to Canadian trade and our preferential tariff extended to New Zealand. This is another step in the consolidation of the Empire.

The revolutionists have won in the little West Indian republic of Santo Domingo, and a new provisional government is established there. The United States minister has warned the leaders that periodical revolutions must cease, or the sovereignty of Santo Domingo will be endangered.

There are rumors that the United States will assume a protectorate over Santo Domingo, in the interest of the world at large. It is safe to say that the world at large will not object; and it will make little difference if the Dominicans are inclined to do so.

It is said that the Monroe Doctrine forbids the British acquiring from the French the islands south of Newfoundland. If it was really a British statesman who invented the Monroe Doctrine, he should have invented a limit to it.

Italy is about to conclude with France a treaty of arbitration similar to that between France and Great Britain; which latter, by the way, the President of France has said we owe to King Edward.

Tumut, a small town on the river of that name, about equidistant from Sydney and Melbourne, has been selected as the capital of the Commonwealth of Australia.

Negotiations between Russia and Japan for the settlement of their differences respecting Corea still continue, with the prospect of peace.

The Welsh settlers in Patagonia who applied to our government for aid to come to Canada now intend to settle in South Africa.

A new customs regulation forbids the importation into Canada of handbills and posters depicting scenes of crime or violence.

Holland will negotiate treaties of arbitration with Germany, France, England, Belgium and other countries.

Lord Strathcona predicts that the population of Canada will be doubled in ten years.

Manual Training.

The Manual Training Teachers' Association of Nova Scotia has on its membership roll all the mechanic science teachers in the province with but a single exception. This augurs well for the success of any movements undertaken by the association. It is only three months since the association was organized.

At its first meeting it was decided to establish a circulating manuscript magazine among the members of the association. Several months ago the magazine was launched and has proved a success. It has already been circulated among the Cape Breton teachers and those of northern Nova Scotia. Each teacher receiving the magazine reads what others have written, adds an original article, and sends it on to the next on the list. It is expected that the magazine will circulate among the members of the association twice a year.

The formal opening of the Dartmouth Manual Training School took place on Nov. 5th. The visitors were many, including Dr. A. H. MacKay, Supt. of Education; Dr. Harper, ex-Inspector of the High Schools of Quebec Province; Mr. T. B. Kidner, Supervisor of Manual Training for Nova Scotia; Principal Norman of the Industrial School, Halifax; E. H. Blois, of the same school; A. McKay, Supervisor of Halifax City Schools; Supervisor Miller of Dartmouth schools; C. R. Hoben, Chairman Halifax Board of School Commissioners; Graham Creighton, Inspector of Schools of Halifax County; C. L. Fultz, Halifax; members of the Dartmouth School Board, and many prominent citizens of the town. Speeches were made by several of the gentlemen mentioned. A public meeting to be addressed by prominent educationists of the province, advertised for the evening, had to be postponed on account of bad weather. In order to give all a chance to become acquainted with the system the members of each class will give an at home to their parents and friends. The first was given by the girls of Grades VIII and IX, and attracted over seventy visitors.

Manual training is now in actual operation in the following towns of Nova Scotia. The names of the teachers are also given. Several schools have benches, and the children are instructed by the regular public school teachers. These are not mentioned in the list. A perusal of the list will show how widely manual training has spread in the last three years:

Pictou, Charles Bruce; Glace Bay, N. L. Cooke; Sydney, J. C. Dawson; Halifax, Nelson Gardner; Yarmouth, Melford Grant; Dartmouth, H. W. Hewitt; Antigonish, Mason Lyons; Truro, F. G. Matthews and Clifford Fairn; Lunenburg and

Bridgewater, V. W. Messenger; Windsor and Kentville, Charles I. McNab; North Sydney and Sydney Mines, W. A. Robinson; New Glasgow, Douglas Patterson; Wolfville, Alex. Sutherland; Industrial School, Halifax, E. H. Blois; Deaf and Dumb Institution, Halifax, Leonard Goucher.

Annapolis will start during the month if not already in actual operation.

H. W. HEWITT,

Sec'y M. T. T. A. of N. S., Dartmouth, N.S.

A French commission appointed by the government some years ago to investigate the subject of manual training, made a careful study of it in the elementary schools of France, and reported to the Minister of Education, that, in its judgment, if one-half of all the time spent by pupils in the elementary schools were given to manual work, they would not only get the benefit of this manual training, but they would accomplish as much in the regular school studies in the remaining one-half of the time, as they now accomplish during the whole period. If manual training is to be introduced into our schools, a place must be made for it by the elimination of unprofitable work. It must not be simply added to what is now attempted.—*Report.*

SCHOOL AND COLLEGE.

The city of Halifax will pay about \$110,000 to maintain its public schools for 1904.

The National Educational Association of the United States will meet in July next at St. Louis during the season of the great World's Fair.

Professor W. F. P. Stockley, now of the Roman Catholic College, Halifax, delighted a large audience in that city recently by a scholarly lecture on the English History in Shakespeare.

Rev. C. W. Corey, of Liverpool, N. S., has been awarded the first prize of \$25 in gold, offered last year by the *Sunday School Times*, of Philadelphia, for the best description of A Christmas Gift Service.

The Restigouche County Teachers' Institute will meet at Campbellton; the Carleton County Institute at Woodstock, and the St. John County Institute at St. John—all on the 17th and 18th of December.

It was reported that the MacDonald school at Kingston, N. B., would not be ready for occupation until next summer, but the contractor asserts that he will have the building ready by January next.

Cornell University is about to erect two buildings at an expense of \$250,000 each. One is the Rockefeller Hall of Physics; the other is the Goldwin Smith Hall of Languages. The latter will include a large museum of archaeology.

We have received a copy of a very interesting paper on School Libraries, read before the Provincial Teachers' Institute at Revelstoke, B. C., by Inspector David Wilson, whom many old friends will remember as a teacher near St. John years ago.

The trustees of Albert, Riverside, Midway, Beaver Brook and Chester school districts have decided to open a consolidated school. A temporary board of trustees for the consolidated district was appointed. The new building will be located between the districts of Albert and Riverside, and will cost in the vicinity of \$15,000.

Some time ago Mr. C. G. Lawrence, teacher at Tracey, N. B., wrote to the masters of schools in several British colonies, asking that scholars in these should correspond with his pupils. The request was willingly complied with. Such an interchange of letters will be of benefit to the pupils in the schools, and be another means of drawing the colonies closer together.

Nineteen lives lost, one lad made insane from injuries, thirty players severely hurt, and hundreds the victims of minor accidents, is the record of school and college foot-ball games during the season of 1903. It is noteworthy that none of the teams of the first class college elevens was killed or disabled, showing the advantage of science and training in this, the roughest game. Does it pay?

Ontario's educational system is seriously threatened. Throughout many of the rural sections of the province there is a scarcity of teachers, and the department has been compelled to admit students to the normal schools who have not previously had one year's teaching experience, as required by the regulations. Low salaries are said to be the primary and almost only reason for the dearth of teachers.—*The Educational Monthly of Canada.*

Only the walls remain standing of the magnificent stone building of the Ottawa-Roman Catholic University. Fire broke out early on the morning of December 2nd, and so rapidly did it spread that two priests of the teaching staff were seriously injured, and several students hurt in leaping from the burning building. The total loss is about \$500,000, covered by \$200,000 insurance. The building accommodated 350 student-boarders, most of whom were from the United States. One of the injured priests has since died.

A correspondent, M. M. K., writing from Vancouver, B. C., under date of November 24th, says: "A right welcome visitor is the REVIEW to the 'sunset doorway of the west,' as it enables me to keep in touch with old friends and educational matters in my home province. I came here in April from New Brunswick. It was a delightful time of the year for travel, and there was fine weather during the trip. The Rockies impressed me with their grandeur. I have not yet got over watching and admiring the mountains,—there is always some new beauty in them. We could see snow on the highest peaks all summer, but there is much more now. The grass is as green as in sum-

mer at home. I am teaching as a substitute teacher for \$50 a month. The schools here are good. In the normal school the students have professional work only, having passed examination in scholarship before entering. They spend the last two months in teaching in the model school, which I think is much better than teaching only twice, as in New Brunswick. The term is six months long."

A novel scheme has been devised in Brussels Street Baptist Sunday-school to overcome tardiness among pupils, both old and young; and though it has been worked but a short time the prospects of a clean punctuality report are brightening each week. Prior to the ringing of the superintendent's bell, which calls the whole school to order, a conspicuous placard is placed on the reading desk, upon which are the words: "I Am Early" in large, black letters. As soon as the bell is rung, the placard is turned around, to read, "I Am Late," so that every person arriving after the tardy sign is hung out is confronted with the gentle accusation, and some are seen to slink up to their places and slip into a chair as if much mortified.—*St. John Globe.*

The Educational Society of Western Kings County, N. S., held an adjourned meeting at Waterville on Monday evening, November 31st, President Osborne in the chair. Mr. F. M. Chute gave a practical lesson on arithmetic; Principal J. Willis Margeson, of Berwick, spoke on the relations between the school and home; Mr. B. H. Lee reviewed the principles of Pestalozzi. Mr. F. Huntington praised the moral work done by the schools, and denied that it was the duty of the school to give religious training. Rev. Mr. Hawley favored having women on school boards, and Mr. F. M. Chute deplored the low rate of pay to teachers, saying that a man with barely intelligence enough to dig was as well paid as a Grade D teacher.—*Condensed from Berwick Register.*

RECENT BOOKS.

SEA MURMURS AND WOODLAND SONGS. By Mrs. S. E. Sherwood Faulkner, Hammond, N. B. Cloth. Pages 111. Toronto: Wm. Briggs, 1903.

This is a pretty little volume of verse. Many of the poems have real merit, and are written in a simple, natural style which appeals to the reader.

ENGLAND'S STORY: A History for Public Schools. By Eva March Tappan, Ph. D., and John C. Saul, M. A. Cloth. Pages 395. Geo. N. Morang & Company, Toronto.

"England's Story," by Eva March Tappan, was published in 1901, and reviewed in these columns in November of that year. Revision and additions of about twenty-five pages bring the work down to the present year, and most of the later history of the country has been re-written, making it more a history of the British Empire than of England. The book is most interestingly written, and the changes above referred to have added greatly to its value.

THE MODERN AGE. By Philip Van Ness Myers, author of a History of Greece, Rome, etc. Cloth. Pages 650. Ginn & Company, Boston.

This book appears as a somewhat comprehensive revision of the author's "Mediæval and Modern History." The book is written in a lucid style, and in that impartial spirit so characteristic of the author whose works are now well known to teachers and students. His masterly summing up of conditions that exist in the world to-day—the expansion of the world-powers, Great Britain, United States, Germany, Russia, France, the awakening of Japan, the contact of the Orient and Occident, the growing predominance of the Anglo-Saxon race, colonial expansion, the labor problem—is an evidence of the writer's keenness of vision and historic instinct.

Longfellow's EVANGELINE. With introduction and notes by H. B. Cotterill. Cloth. Pages 92. Macmillan & Company, London.

The introduction contains the life of Longfellow, remarks on Evangeline, and a history of the Acadians.

Chaucer's THE KNIGHT'S TALE. Edited with introduction and notes by Alfred W. Pollard. Cloth. Pages 162. Macmillan & Company, London.

One of the most interesting of Chaucer's stories is here given in the original spelling, but with a full glossary for the reader.

THE HISTORY OF MEDIAEVAL EDUCATION. By Samuel G. Williams, Ph.D. Cloth. Pages 195. C. W. Bardeen, Syracuse, N. Y.

This book contains the series of lectures given by Prof. Williams, of Cornell University, and is a distinct addition to educational literature.

THE SHIP OF STATE. By Those at the Helm. Cloth. Pages 264. Illustrated. Ginn & Co., Boston.

A book consisting of twelve important and timely essays, beginning with one by Theodore Roosevelt, on the Presidency, and ending with The American Post Office, by Ex-postmaster-General W. L. Wilson.

PRIMER OF ENGLISH LITERATURE. By Abby Willis Howes. Cloth. Illustrated. Pages vi+190. D. C. Heath & Co., Boston.

This is an attractive little volume, containing in plain direct language the chief facts of English literary history, with twelve full-page portraits, and a literary map of England, a unique feature.

THE NEW YORK COMMON SCHOOL SYSTEM. By Andrew S. Draper. Cloth. Pages 107. C. W. Bardeen, Syracuse, N. Y.

This is a presentation in book form of an address giving the history of education in the State of New York.

A FRENCH READER. By Fred. D. Aldrich and Irving L. Foster. Cloth. 304 pages. Ginn & Company, Boston.

The selections are interesting to the student, carefully graded, and contain a large amount of easy matter taken from French folklore,

THE PSYCHOLOGY OF CHILD DEVELOPMENT. By Irving King, with an introduction by John Dewey. 280 pp. Cloth. The University of Chicago Press, Chicago, Illinois.

The author from a new point of view, that is, how and under what circumstances the mental processes arise and what they mean to the child, sketches the process of mental growth in children, with special reference to their development during the school years.

ANIMAL EDUCATION. By John B. Watson. 122 pp., with three plates. Cloth. The University of Chicago Press, Chicago, Illinois.

This book offers an interesting contribution to our knowledge of the mental life of animals.

GEOGRAPHIC INFLUENCES IN AMERICAN HISTORY. By Albert

Perry Brigham, Professor of Geology in Colgate University. Cloth. 366 pages. Ginn & Company, Boston.

In this new book Professor Brigham has presented vividly and clearly those physiographic features of the United States which have been important in the unfolding of industrial and national life. The arrangement is mainly geographical. Among the themes receiving special treatment are: The Eastern Gateway of the United States, the Appalachian Barrier, the Great Lakes and Commerce, the Civil War, and Mines and Mountain Life. Two excellent features of the book are its abundant illustrations and the easy natural style in which it is written.

ZOOLOGY, DESCRIPTIVE AND PRACTICAL. By Buel P. Colton, Professor of Science, Illinois State Normal University. Author of the Colton Series of Physiologies. Cloth. Fully illustrated. 606 pages. \$1.50. Also bound separately, Part One, 385 pages, \$1.00. Part Two, 221 pages, 60 cents.

The agreeable impression that the large, clear type and illustrations make on first opening the book is heightened by the careful methodical treatment everywhere observable throughout its pages. The descriptions are clear, based on the study of types and representatives of groups, and well fitted to arouse interest in the subject. The practical part contains directions for field, home or laboratory study, and for the dissection of a number of typical common animals. It is an admirable introduction to the study of animal life.

Macaulay's LIFE OF JOHNSON. By Albert Perry Walker. Cloth. Pages 92. D. C. Heath & Co., Boston.

The features of this book are its concise and well-printed pages, its introduction, which contains an outline of Macaulay's life, with contemporary matter, and notes which are not too many, but discriminating and helpful.

MUSIC READER. By James M. McLaughlin, Geo. A. Veazie and W. W. Gilchrist. Cloth. Pages 122. Ginn & Co., Boston.

This New First Music Reader of the Educational Music Course is the first reader to be placed in the hands of the pupil, and presents material for two years' music study. The book contains ninety new songs and sixty new poems, fully tested by critics and actual use in the class-room,

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THE COPP, CLARK CO., LTD., PUBLISHERS, TORONTO.

Sievers' OLD ENGLISH GRAMMAR. Revised edition. Translated and edited by Albert S. Cook, Yale University. Cloth. 422 pages. Ginn & Company, Boston.

The edition of this standard grammar, the basis of which is the language of the older prose writings, is indispensable to the student of early English.

GEOGRAPHY MANUAL. By Alexis E. Frye. Card. Pages 78. Ginn & Company, Boston.

A capital little manual for teachers, containing many valuable hints for teaching geography.

MANUAL OF PRACTICAL MATHEMATICS. By Frank Castle, Royal College of Science, South Kensington. Cloth. Pages 541. Macmillan & Co., London.

The author, in a compact volume of practical examples and exercises, based upon his experience as a teacher, brings within the reach of students what is most useful in an advanced course of mathematics.

HUMAN PHYSIOLOGY, for schools. By John I. Jęgi, M. S., Professor of Physiology and Psychology in State Normal School, Milwaukee. Cloth. Fully illustrated. Pages 343. New York: The Macmillan Company. Toronto: George N. Morang & Company.

The various topics of physiology, personal hygiene and public health, are presented in a clear and natural order. The structure and functions of the cell are taught from the first, and when a good foundation in physiology has been

assured, the central thought of the book—personal hygiene and public health—is taken up and treated in a clear and progressive manner, and in language as simple as the subject will allow.

ELEMENTARY PLANE GEOMETRY. By Alfred Baker, M. A., F. R. S. C., Professor of Mathematics, Toronto University. Cloth. 146 pages. Ginn & Company, Boston. W. J. Gage & Company, Ltd., Toronto.

This is a geometry for beginners. The author approaches the subject from the inductive side, and the pupil is led from the first to make accurate measurements, and to do and find out for himself what is arbitrarily laid down in most text-books. The book is an excellent aid to the teacher in adapting the subject to immature minds.

TENNYSON'S POEMS. Edited by Henry Van Dyke, Murray Professor of English Literature in Princeton University. Cloth. Pages cxxii+490. Ginn & Company, Boston.

This is a beautiful and convenient volume, presenting the best of Tennyson's poems, selected by one who has made a close study of England's greatest poet of the nineteenth century. The selections admirably demonstrate Dr. Van Dyke's keen sense of literary values. The book includes an introduction, giving a sketch of Tennyson's relation to his times, an account of the poet's life, a description of the way in which he worked, and finally a summary of the leading characteristics of his poetry.

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THE HIGH SCHOOL CHORALIST, for high schools, academies, musical associations and the home circle. By Charles Edward Whiting, formerly teacher of music in the Boston Public Schools. Boards. Pages 272. D. C. Heath & Company, Boston.

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THE CORONA SONG BOOK. A choice collection of choruses designed for the use of high schools, grammar schools, academies and seminaries. Selected, compiled and arranged by William C. Hoff, Director of Music in the Public Schools of Yonkers, N. Y. Quarto. Cloth. 362 pages. Ginn & Company, Boston.

It is convenient in size, attractive in appearance and content, and with a choice selection of songs.

DECEMBER MAGAZINES.

The December *Atlantic* has a fine series of papers on current themes. Sir Leslie Stephen continues his delightful and instructive reminiscences with a chapter of his

own experiences in Editing, giving many inside views of English journalism and lively anecdotes of English *literati*. There are also stories, reviews and poems, making up an excellent number. . . . The *Canadian Magazine* is a fine number, especially in its illustrations and stories appropriate to the Christmas season. Two historical articles, fully illustrated, are given—A Typical Canadian City (Toronto), by Norman Patterson, and Dr. Hannay's twelfth instalment of the War of 1812, completing the series. . . . The Christmas *Delineator* contains 240 pages, and is a beautiful number. In addition to exquisite color work, clever fiction and strikingly illustrated articles, the number includes a display of charming winter fashions, and for the children there are entertaining games and stories, and for the housewife many practical suggestions in cookery and other departments of the home, for the Christmas season. . . . Mr. Chamberlain's fiscal proposals figure so largely in current news and discussion that many must be glad to have an opportunity to learn from Mr. Chamberlain himself just what they are and by what arguments they are supported. This opportunity they will have in *The Living Age* for December 12th, which is to re-print without abridgment Mr. Chamberlain's Glasgow speech, as revised by him for publication.

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1904

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WHOSE Cheerful Yesterdays were among the most readable reminiscent papers ever printed, has written for the Atlantic six new articles in the same vein under the title *Part of a Man's Life*.

MODERN ADVERTISING

NOVEL discussions, by experts, of several phases of contemporary advertising. The first paper, *The Psychology of Advertising*, is by Professor W. D. Scott. It will be followed by *The Abuses of Public Advertising*, by Charles Mulford Robinson.

THE ETHICS OF BUSINESS

A group of trenchant inquiries into the right and wrong of present business methods. The first article, *Commercialism in Disgrace*, has been written by John Graham Brooks.

SPECIAL OFFER TO NEW SUBSCRIBERS

In order to introduce the Atlantic Monthly to new readers, the publishers offer three issues, as a special trial subscription, for 50 cents. Upon receipt of \$4.00 they will mail the October, November, and December numbers, and the magazine for the entire year of 1904, to new subscribers.

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St. John Co. Teachers' Institute

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DEC. 17 AND 18, 1903.

PROGRAMME.

THURSDAY, December 17th.

- 10.00 a.m.—Music by High School Orchestra.
Organization and Report of Committee
11.00 a.m.—Address: "The Ideal in Education,"
by Wm. Crockett, M.A., LL.D., Principal
of Provincial Normal School,
Fredericton, N. B.
2.00 p.m.—Solo, by Miss Edith Comben. Address:
"The Truant, and what Produces
Him and How to Deal with
Him," by Frank Owens, A.B., Principal
St. Patrick's School, St. John, N. B.
Discussion: Opened by W. M. McLean,
M.A., and Mr. McDiarmid.
3.00 p.m.—Address: "Manual Work and Writing,"
by Miss Edna W. Gilmour.
Discussion: Opened by A. L. Dyke-
man, and Jos. Harrington.
FRIDAY, December 18th.
9.00 a.m.—Solo: by Miss Alicia McCaron. Election
of Officers and Miscellaneous
Business.
10.00 a.m.—Informal Talk on "Physical Culture,"
by Miss Florence Rogers, Graduate of
Emerson College of Oratory, Boston,
Mass. Discussion: Opened by Dr. H.
S. Bridges, and Mr. W. H. Parlee.
11.00 a.m.—Instruction and Book Study—Open
Discussion.
2.00 p.m.—High School Orchestra. Address:
"School Management," by H. S.
Bridges, M.A., Ph.D. Discussion:
Opened by Mr. M. D. Coll, and Mr.
W. A. Nelson.

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EDUCATION DEPARTMENT, N. B.

Official Notices.

I. SCHOOL YEAR 1903-4—NUMBER OF TEACHING DAYS.

The number of Teaching Days for School Year is as follows:
Ordinary Districts 216; Districts having eight weeks summer vacation
206; St. John City 205.

The First Term ends on Friday, December 18th, 1903, and the Second
Term begins on Monday, January 4th, and ends on June 30th, 1904. The
Second Term has 125 Teaching Days in all Districts except the City of
St. John where the number of Teaching Days for the Term is 124.

II. DEPARTMENTAL EXAMINATIONS.

The several Departmental Examinations will be held as in former
years in accordance with the provisions of Regulations 31, 32, 45 and 46.

The subjects for the Leaving Examinations shall consist of English
Language, English Literature, History and Geography, Arithmetic and
Book-keeping, Algebra, Geometry, Botany and Agriculture, with any
two of the following: Physics, Chemistry, Physiology, Latin, Greek,
French—(Nine papers in all).

All candidates for Matriculation shall take the following subjects:
Latin, Arithmetic and Algebra, Geometry, History and Geography,
English Language, English Literature, Chemistry: also, either Greek or
French and Natural History.

All candidates for the Matriculation and Leaving Examinations must
send in their applications to the Inspector within whose inspectorate
they propose to be examined, not later than the 24th day of May. A fee
of two dollars must accompany each application. Forms of applica-
tion may be obtained from the inspectors or from the Education Office.
The English Literature Subjects for the Matriculation and Leaving
Examinations will be the same as for the First-Class Candidates at the
Closing Examinations, viz: Tennyson's *Princess* and Shakespeare's
Hamlet.

HIGH SCHOOL ENTRANCE EXAMINATION MEDALS.

His Honour the Lieutenant-Governor has been pleased to offer Thirteen
Silver Medals to be competed for by the pupils of the Eighth Grade at
the High School Entrance Examinations in June next, and thereafter
annually during his term of office.

The examinations will be held in accordance with the provisions of
Regulation 46 at the several Grammar Schools and at such of the Superior
Schools as shall make application to the Chief Superintendent not later
than the First day of June.

One medal will be competed for by the pupils of each County, except
that for the purposes of this competition Madawaska and Victoria will
be reckoned as one County, and Sunbury and Queens as one County.

The medal will be awarded to the pupil making the highest aggregate
marks in each case, provided that no candidate falling below the Second
Division shall be entitled to a Medal. The papers of the candidates
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for a final examination to special examiners appointed by the Board of
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J. R. INCH,

Chief Supt. of Education.

Education Office, Fredericton, Dec. 7th, 1903.

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BY JAMES HANNAY.

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