

# THE EDUCATIONAL REVIEW.

FOR THE ATLANTIC PROVINCES OF CANADA.

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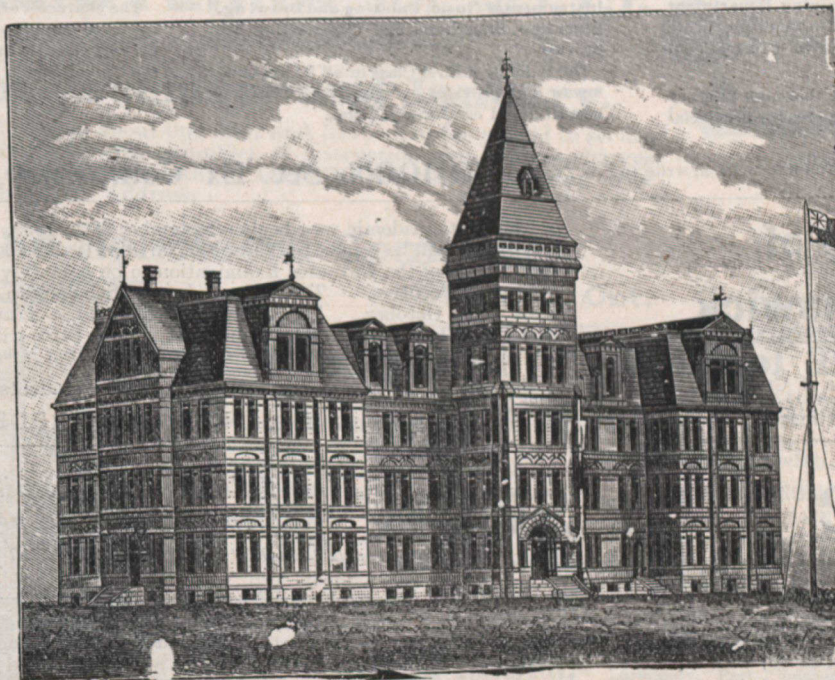
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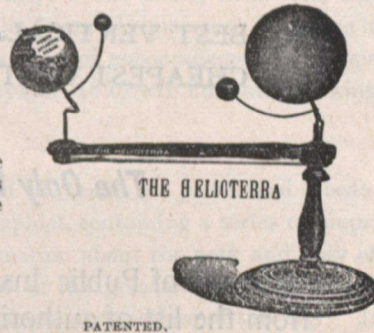
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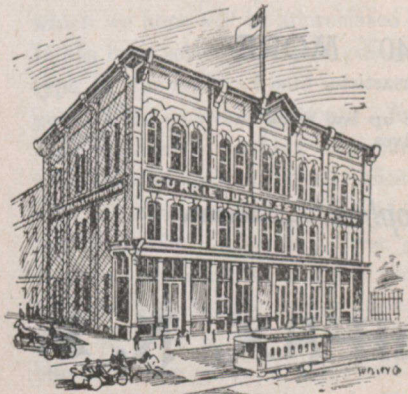
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G. U. HAY,  
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*THE EDUCATIONAL REVIEW* is published about the 10th of every month. If not received within a week after that date, write to the office.

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WITH this number we send out a Christmas Supplement containing a picture of the Madonna and Child, which we hope will be appreciated by our many readers. It has been selected with a great deal of care, not as a type of the stiff and cold representations that distinguished the earliest Madonnas—for the early Christians were opposed to making a picture of anything for its mere beauty—but rather as typical of that grace, beauty and tenderness which we instinctively associate with the Madonna. After all, these pictures are but the creations of an artist; and the painter who has clothed his ideal with beauty and a thoughtful tenderness has done far more to give us a devotional spirit than the one who has given a plain and crude representation such as distinguished the early Madonnas.

WITH this number of the *REVIEW*, a slip of paper goes to each subscriber who has not already paid in advance showing a statement of what is due at this date. Such statements are sent to subscribers twice a year. We hope they will be as ready to respond to these requests as we are ready and anxious to give them from month to month good value for their money. No one can deny that the *REVIEW* has been a great factor in the educational progress of these provinces during the nearly twelve years that it has been published; and the teachers who read it will acknowledge its usefulness to themselves. This much as to its success educationally. It has never been what may be called a financial success; but by industry and economy, together with the disposition of the great majority of our subscribers to stand loyally by us and meet their obligations, we have been able to conduct the *REVIEW* on business principles and to "pay as we go." We wish all our readers A Merry Christmas and a Happy New Year. And if there is one among them who has never contributed to its financial support, or by giving it a useful thought, or a word of encouragement, we hope the few remaining days of 1898 will find him seeking the penitent bench.

The St. John Board of Trade has just issued a beautifully illustrated pamphlet, containing a series of maps, engravings and information about the port and Bay of Fundy, which will be of the greatest advantage to all interested in the business and welfare of the city. It is printed at the *Globe* office and is a beautiful specimen of the printers and engraver's art.

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THE *Canadian Almanac* for 1899, published by the Copp, Clark Company, Toronto, at the low rate of 25 cents, is such a valuable compendium of information that no one should be without it. It has been published continuously for over half a century, and has grown from a pamphlet of 100 pages to a handsome book of 376 pages, well illustrating the growth and prosperity of Canada. Among the contents of the book which are especially valuable are: the Customs Tariff, Post Office Guide, and Directories of various persons and officials, all of which are brought up to date, while the articles on the British Army and Navy, and Forms of Government throughout the world are interesting and reliable. A feature that appeals particularly to all who are interested in the current history of the world is the Historical Diary, which is carefully prepared each year, and gives an excellent resume of the year's history.

#### Education in P. E. Island.

There is not a province in the Dominion where educational questions are discussed with more zeal, perhaps one might say asperity, than in Prince Edward Island. One can scarcely take up a paper without finding some anonymous correspondent laboring to prove that too much money is spent on education, that the teachers are incompetent as a class, and that their only aim is to pocket their salaries, and grumble because the whole revenue cannot be appropriated to schools. Amid this growl of discontent one can occasionally hear a more reasonable voice counselling moderation and justice to hard working teachers, but this voice is rarer.

A subject of keen debate for some time past has been the cutting off by the government of supplementary grants formerly given to teachers on condition that a like amount should be raised by the district. The minimum grant for this purpose was ten dollars, the maximum twenty-five dollars. This had been in force since the passage of the free school act, but the government in repealing the supplementary clause last winter held that the provincial revenues could no longer stand the strain, and that outside the larger centres of population, districts which should avail themselves of the bonus were not taking advantage of it. At the recent meeting of the Teachers' Association at Charlottetown, mutterings of discontent were heard on all sides at the action of the government, and at the final session of the

association the gage of battle was thrown down in a resolution strongly condemning the government for its course. The premier of the province, with another member of the government, was on hand to support the stand taken; and though he boldly stood his ground, and pointed out that retrenchment must be adopted somewhere, the teachers were in no mood to have retrenchment practised on themselves, and carried the resolution by an almost unanimous vote.

And yet the government of Prince Edward Island is a paternal government, so far as schools are concerned, for it grants yearly about two-thirds of its revenue to their support. One learns with some surprise that one-half the schools are supported solely by the amount of government money paid to the teacher. The inhabitants of a district may build a schoolhouse and furnish it, and then, if they can induce a teacher to assume charge of it for the government grant, their direct contribution to education ceases, except in supplying fuel during the winter season. One objection to local assessment frequently heard is that the inhabitants are too poor, but one looks in vain for evidences of this as he journeys through the country. On all sides well-tilled acres, comfortable houses and barns meet the view. The fault of the government is that it is too paternal. In not placing the responsibility of school maintenance on those who should bear at least a portion of it, there is a lack of public spirit, and little or no interest in too many communities in educational matters. The result is seen in poor schools and scantily remunerated teachers. Districts not responsible for the payment of teachers are allowed to maintain schools with a surprisingly low attendance of pupils, that would not be tolerated in the adjoining provinces. Consolidation of schools in the rural districts of Prince Edward Island could be effected with a saving, it is believed, in the money that is now spent in keeping up a number of small and insufficiently equipped schools, and lead to the establishment of excellent schools throughout the Island like those of Charlottetown, Kensington, Summerside and a few other places where the additional subjects of manual training and the principles of agriculture could be taught. These subjects have long been called for by those most conversant with the educational needs of the Island. With its comparatively dense population, the generally level country, and fairly good roads, the carriage of pupils to a central school would not be a matter of great difficulty in most sections of the Island. In no portion of the Maritime provinces is there a better possibility for establishing central graded schools, and certainly in no other province is there greater need of re-organization of its rural schools.



### Science in the Public Schools.

Supervisor McKay, of the Halifax schools, in his presidential address before the Nova Scotia Institute of Science, makes the astonishing statement that the study of science "may be fairly well done in five per cent. of the schools; with very varying degrees of success in 60 per cent., and scarcely attempted in the remainder."

Mr. McKay has excellent opportunities for procuring data on which to base such a statement, and one is inclined to accept his conclusions as correct. In New Brunswick it is doubtful if any better results can be shown. The same opportunity for testing the work done by examination does not exist, though the individual efforts of a teacher like Mr. Brittain, in the Normal school, have undoubtedly accomplished much in stimulating and directing such instruction in schools throughout the province. In Prince Edward Island schools there is nothing to indicate that natural science work has made any marked progress, except in a few sections and by a few teachers. And yet, no doubt, there is a distinct advance in these provinces, both in the desire to teach this branch successfully, and an honest attempt on the part of an increasing number of teachers to lead their pupils to habits of observation, and to acquire for themselves laboratory methods of instruction. As long as the teachers depend on the text-book, and have but little knowledge and less interest in the subjects of nature study, there will be dismal failure, strengthening the impression that is abroad among parents, especially in the country districts, that the teacher is frittering away time, and wasting the energies of pupils, if he gives attention to natural science subjects. And, let us confess it, such an impression is not without some practical common sense to support it. Who could expect that a teacher who has spent many years in acquiring even an elementary knowledge of English and other branches could be expected to train pupils in subjects in which he himself has received no adequate training?

Mr. McKay thinks that—

"The majority of teachers would do better science work if they could, but they have never seen it done; they cannot learn how from books; and they have not the pecuniary or moral support that comes from a general intelligent appreciation of the material, intellectual and moral benefits resulting from scientific training." \* \* \* \*

"Provincial examinations show that experimental work is almost wholly neglected. The mental confusion and crudity of conception apparent in a large proportion of the answers received would tend to show that much of the science teaching is simply a mechanical memorizing of the text book." \* \*

"More or less successful attempts are being made in some of the colleges to teach science. But, divided and scattered as they are, five degree-conferring institutions in a small prov-

ince of scarcely half a million inhabitants, with no preparatory schools capable of giving a proper preliminary science training, it is small wonder that they take little interest in the teaching of new subjects which require expensive apparatus and hard work." \* \* \* \*

Mr. McKay, after comparing our lack of scientific and technical instruction with the excellent work that is being done in European countries, recommends the following means to secure for science the place which it should have in the actual work of the schools and colleges.

(a) Make it an imperative subject in the college matriculation examination for B. A. \* \* \* \*

Until the colleges takes this step in advance science will not be well taught in the schools, and until science is well taught in the schools the colleges will not have students capable of doing the best science work.

(b) The present grade "A" work in the academies should be discontinued and its place should be taken by a more thorough practical science course for grade "B." \* \*

(c) The professional training of academic teachers and of the principals of the larger schools should be part of a college course. Their professional training should be a post graduate course at least in part. If our larger colleges cannot provide pedagogical training for the few grade "A" teachers that we need, we will have in the meantime no difficulty in obtaining it abroad; but wherever it is obtained, let it be as thorough as the post graduate training required in the other professions.

(d) Examinations in science, whether by the colleges or by the education department, should be so modified as to take into account the pupil's laboratory work throughout the term and his present ability to perform and interpret experiments and also to examine and classify mineral, plant and animal specimens. A certified copy of his note book of experiments should be taken as evidence of his work. In order to have some reasonable certainty that this work was honestly reported, it would be necessary for some qualified person to inspect the laboratories and see the students at work twice every year.

A written examination does not adequately test a student's science acquirements. If the provincial grade "A" scientific examinations are to be continued they should be conducted at the Normal school, and every candidate should have to do a certain amount of laboratory work in the presence of the examiner.

In a recent number of the *New England Journal of Education* reference is made to the naming of a new school building in Cambridge, Mass., after the senior schoolmaster of that city. The *Journal* says: "The greatest monument that can be reared to a teacher is a school building bearing his name. It is every way appropriate, and is due a man like Mr. Roberts, who has educated more boys and girls than any other teacher in the city, a man more than eighty years of age, who has taught in the city for more than fifty years. In these days, when it is easier to hustle an old man out of the profession than to honor him in it, we are rejoiced to see a step taken in the right direction."



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**EDITORIAL CORRESPONDENCE.**


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**Boston Schools—Popularity of the Kindergarten  
—The Status of Teachers—Manual Training.**


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BOSTON, Nov. 19th, 1898.

Readers of the REVIEW may be interested in hearing something of Boston schools. Of the nearly 2,000 teachers employed within the limits of that city—more than in the whole province of New Brunswick—scarcely more than twelve per cent. are males. As might be expected, the seven hundred teachers employed in the kindergarten and primary schools are all females, but one learns with some curiosity that even in the high schools there is an excess of female teachers. Many believe that this preponderance of female teachers is too great.

Boston requires each year five new school buildings, containing on an average over fifteen departments each, to accommodate the three thousand and more additional pupils who demand entrance to the schools. This means an increase of more than three quarters of a million dollars each year for school purposes on this account alone.

The city has 4,000 children in public kindergartens, out of a population of 7,000 of kindergarten age. This is an increase of 1,500 in the past four years, and speaks volumes for the importance of such training in the eyes of the people.

To look after its educational interests Boston has an elective school board of twenty-three, a superintendent, and six supervisors. The appointment of teachers is vested in the superintendent, subject to the approval of the board, or school committee, as it is called. How far the influence of the board is exerted to secure the appointment of its favorites is known only to the initiated; but it is evident that this influence is less here than in many places. This is a wise and liberal policy, the value of which in educational results can scarcely be estimated. Dr. E. P. Seaver, the superintendent, is a man of sound judgment and wide experience. Acting with a free hand, with the advice of his supervisors and principals, and choosing the best available teachers, there can be no doubt that this is a distinct gain for education.

All candidates for position have to pass the supervisors' examination. A regulation has also been recently made by which a teacher, after appointment, has to pass a period of probation of two years. If the teacher during this period of probation gives satisfactory proof of ability to teach, she is placed on the permanent staff. This is another important step in advance. The ability to pass a successful examination does not

always, as everyone will admit, ensure competent teachers. This period of probation is expected to prove the safeguard against the admission of those who have no gift for teaching, and who do not show any special fitness from the experience gained while on trial. There is a large proportion, nearly one-fourth of the teachers of Boston, whose work is classed as "inferior." Many of these have devoted their lives to teaching, and would be fit subjects for pensions, if Boston pensioned her teachers, which she does not. A practical suggestion has been put forward to retire these teachers on reduced pay for such efficient services as they may be still able to render. It is estimated that this plan would impose but little additional burden on the taxpayer, if these teachers were replaced by younger ones with minimum salaries.

It is instructive to notice the attention that is given to manual training in the Boston schools. While it is perhaps not carried on to the extent that it is in other large cities of the United States, certainly not to the extent that it is in the schools of Germany, France and England, it is producing the most satisfactory educational results. The system is no longer on trial. It is an accomplished fact. From the kindergarten to the high school the education of the hand, and through it the mind, is kept steadily in view. Manual training is regularly begun and carried on in the grammar schools, where all pupils receive a certain amount of manual training—wood-working for the boys, and sewing and cookery for the girls. It was a surprise to me to find some of the best taught classes in wood-working under the instruction of women. No instance of men giving instruction in cookery and sewing was observed. There are special instructors in all these departments where hand work is taught. This of course adds to the cost for such instruction. The public school teacher in the near future will probably be given the option of either giving instruction in manual training or paying for the same out of his own salary. This suggests that manual training will form an important part of the training of teachers. And why not? No woman would care to acknowledge that she could not prepare herself to teach sewing, cookery, and even wood-working, scientifically, especially if the added cost for such education meant an increase of salary. And men teachers would make their services of more value if to their qualifications for general teaching they added at least one of the specialties named above.

Instruction in manual training may end at the entrance to the high school, which has three divisions: the Latin high school, where preparation especially for



college is made; the English high school, where more attention is given to English and the modern languages; and the Mechanics Arts high school where instruction is given in manual training for two hours a day, the remaining period being devoted to English, mathematics and drawing, an education fitting the pupils for entrance into the advanced technical schools, or for engineering, mining, or any of the industrial pursuits. Two hours spent in the various departments of the Mechanics Arts school, in which were nearly a thousand boys, gave me many proofs of the inestimable advantage that it gives to a boy of a mechanical turn, and indeed to all active boys whose restlessness and ingenuity are turned to good account in alternating manual training with their studies in language and mathematics. The value of such a course as a discipline for the professions or the industries of life is clear. Boys are induced to remain longer at school, take a greater interest in their work while there, and go forth to the business of life with a far better preparation than those whose attention is exclusively given to books while at school.

Is the question of the value of manual training in schools settled? Undoubtedly it is; and those places that have not incorporated it into the work of the schools are, educationally, behind. We have excellent school systems in the Atlantic provinces, but so long as we fail to grasp the importance of manual training as a part of our educational equipment, or are too conservative and apathetic not to realize the advantages that it would give to public-school education, just so long will we remain behind.

It is a great pleasure to return my thanks to Mr. S. A. Wetmore, a former member of the Boston school committee, for his untiring attention and courtesy, and whose knowledge of the schools gave me special opportunities to find out much that I wished to know; and also to Supt. Seaver, who placed his valuable time freely at my disposal.

G. U. HAY.

### NATURE STUDY.

#### A Talk About Water-Drops.

BY PROF. A. WILMER DUFF.

(Concluded).

But we have not answered the question, "What is snow?" Snow-flakes are not frozen water-drops, for if they were they would be round like water-drops. They consist of particles of water vapor which have been caught and fixed in position by some invisible power before they united to form water-drops. This power is not merely the coldness of the air, for that could not give the snow flakes their regular shape. The star-making power is something more than mere cold, or

even the cohesion which we spoke of before, but we shall not at the present time attempt to explain it. If you wish to find the effect of great cold alone on water vapor, fill a tumbler with a mixture of salt and snow and observe how the vapor particles from the air are deposited on the outside, owing to the intense cold produced by the freezing mixture. What you get here is much like the hoarfrost that takes the place of dew on very cold nights, and, in fact, hoarfrost is merely frozen vapor which did not become liquid before freezing.

Perhaps you are somewhat surprised at the statement that vapor can turn into a kind of ice, such as snow or hoarfrost, without first becoming liquid water. Yet there is no doubt about it, and it is no more surprising than the other fact that snow or ice can turn into vapor without first becoming water. For instance, when there is very cold weather for two or three days together, it is often found that the snow disappears, although the weather is quite too cold for it to melt. It has simply flown away particle by particle as vapor. You may have to wait a good while before you get a chance to observe this, but there is another way of observing the same thing. The next time that clothes are put out to dry on a very cold day notice that the clothes can dry almost completely although it was certainly too cold for the ice on them to melt into water. You may say that it has melted into vapor.

Although snow does not consist of frozen water-drops, yet we are all familiar with frozen water-drops under the name of hail. These little ice balls come down sometimes in summer when the air does not seem cold enough to freeze water. But they must have been frozen somewhere before reaching the earth, and so we learn that there must be somewhere above us on a summer day places where the air is cold enough to produce ice. You can often see such a place, even on a hot summer day, if you wish. Look for a cloud that seems very high up, one that resembles hairs or feathers with their fibres curled. These clouds are sometimes called horse-tail clouds. They consist really of small pieces of ice instead of drops of water. When you see many of these clouds you may expect wind soon, or at least a change of weather. They are very high up, sometimes as much as ten miles. You must not, however, suppose that the hail actually comes from these clouds. It really is formed much nearer the surface of the earth by very cold currents of air. If the drops are first frozen into hail by cold air, and these frozen drops before reaching the earth have to pass through a thick layer of warm air, they are partly melted again, and we get what is called *sleet*.

We have said a good deal about water vapor shrinking as it is cooled until it becomes drops of water. What happens to water as it is cooled? Does it shrink? Try it for yourself in this way: Take a large glass bottle with a narrow neck. Fill it first with pretty warm water, merely to warm it up. Then pour this out and fill it with water that is nearly boiling. Tie a string around the neck just where the water stands, cork the bottle and put it where it can cool. Look at it as it cools, and notice that the level of the water falls steadily.

We thus see that water shrinks as it cools. Notice which part of the bottle is the colder, and see if you can



explain why. If the day is cold enough you may at last get the water down to the freezing point. You will find, however, that it does not go on shrinking right down to where it begins to freeze. A little expansion actually occurs before the freezing point is reached, but unless your bottle be very large and have a very narrow neck, you may not be able to see this. If you can get a small glass tube and pass it through the cork and then shove the cork hard into the bottle full of water, you may make a very narrow neck for the bottle, and then you may be able to see this slight expansion of the water before it is quite down to the freezing point.

But what happens when the water actually begins to freeze? Leave the bottle of water out on a very cold night and see what has happened in the morning. You will find that the bottle has cracked, showing that when the water began to freeze it must have expanded in volume, and as the bottle couldn't expand also, the latter was shattered. So we see that while water vapor and water both shrink steadily as they cool, when water turns into ice it expands instead of shrinking, and therefore the ice must be less dense than the water. Now, any solid that is less dense than water will float on water, and so we see why ice always floats on water instead of sinking. Try this for yourself with a lump of ice and a tumbler of water. Try and judge how much of the ice is above the water and how much below. If you can judge very accurately you will find that there are about eleven times as much of it below as above.

How many different effects produced by this expansion of freezing water can you think of? There are some very important ones indeed; but we must leave such questions as these for another leaflet.

### Water-Drops in Literature.

(A sequel to "Nature Study," November REVIEW, page 107.)

T. You have now been making observations on water drops of all kinds for the last few weeks, and you know how fogs, clouds, rains, dews, and even the beautiful snow crystals come. Now let us search for some references, say, to dewdrops in literature. Let us notice what some of our great writers knew, or thought about, when they saw the pearl or diamond glitter on the fairy draped blades of grass in the early morning. Most of them did not know so much as you do about them, although the thoughts awakened in their minds may have been more picturesque. But why should not we have just as picturesque thoughts aroused by the sights?

S. Why? I think we do. The more you know about a thing the more thoughts you can have about them.

T. That is a very wise observation. I cannot put it any better. I think you are right. But even when little is known of a thing, the poet can take pleasure in it. But if the poet showed that he didn't notice accu-

rately what he professed to have seen, what would you think of him?

S. Not very much. For we read books only when they tell us something better than we could ourselves.

T. Very good. Now I commence by reading my quotation. It is more than 3,000 years old.

Hath the rain a father? or  
Who hath begotten the drops of dew.

—Job xxxviii, 28.

What remark can any of you make on this?

S. I think that in those days the works of nature were not so closely examined as to-day, and the poet mentions these phenomena as specimens of the mysteries which people in that day could not venture to explain.

ANOTHER S. He has it in his mind that rain and dew come from something before them, as is the case with men and animals, but no one appears to have known from what they came. The dewdrop came out of the still air, but from what?

T. These two answers are quite to the point. But let us have another quotation.

S. Dewdrops are the gems of morning,  
But the tears of mournful eve.

—Coleridge—*Youth and Age*.

T. What is the picture or figure here?

S. The morning is decked in gems, and is gay; the evening is dark, and the moisture on the grass suggests tears.

T. Well, let it pass, and have another.

S. The dew

'Tis of the tears which stars weep, sweet with joy.

—Bailey—*Festus*.

T. Why does the poet make the stars weep, do you think?

S. The stars are the most striking objects visible at night, and the dewdrops are underneath them, as if they fell as tears. But as the poet is not sad, he feels he must correct his picture by noting that the emblem of sorrow is sweet with joy. They are teardrops, but not of sorrow: for the stars are happy.

S. The dew-bead  
Gem of earth and sky begotten.

—George Eliot—*The Spanish Gypsy*.

T. Here the dewdrop is a gem, as in the mind of Coleridge.

S. Seems to me George Eliot was thinking of the question of Job, and answered it, though not in the scientific way Job challenged. The earth and the sky are the parents of the dewdrop, but that poetic fact was patent even in the days of Job.

T. Would not the cloud and the earth make good parents of the dew?



S. No, for on cloudy nights there is no dew. It comes only when the earth and clear sky are present.

S. Here the dewdrop is a gem of a particular kind:

I must go seek some dewdrops here,  
And hang a pearl in every cowslip's ear.

—*Midsummer Night's Dream*—Act II, Scene 1.

T. Yes. Shakespeare figures the cowslips in full dress, with their jewels on; and the dewdrops are pearls.

S. Stars of morning, dewdrops, which the sun  
Impearls on every leaf and every flower.

—*Milton*—*Paradise Lost*, V, 746.

S. Longfellow seems to have seen a lot in the tiny drop. He must have been looking very closely into one and have seen reflections which he could not fix, and which were constantly changing, for it suggested the words:

Every dewdrop and raindrop had a whole heaven within it.

—*Longfellow*—*Hyperion*, III, 7.

S. Yes, but I think he did not examine it in the sunlight so thoroughly as Tennyson, who noticed something very definite in it, when he said:

And every dewdrop paints a bow.

—*Tennyson*—*In Memoriam*, CXXI.

T. Very good. You have also noticed the prism effect of the dewdrop.

S. Here the dewdrop is described as falling to the ground:

The dewdrops in the breeze of morn,  
Trembling and sparkling on the thorn,  
Falls to the ground, escapes the eye,  
Yet mounts on sunbeams to the sky.

—*Montgomery*—*A Recollection of Mary F.*

T. And the poet pictures it as prettily mounting again to the sky on a sunbeam, whence it may come down another evening.

S. Here it is figured as slipping into the sea, where it is swallowed up:

The dewdrop slips into the shining sea.

—*Edwin Arnold*—*Light of Asia*, VIII, last line

T. One more.

S. Dewdrops, Nature's tears which she  
Sheds in her own breast for the fair which die.  
The sun insists on gladness; but at night  
When he is gone, poor Nature loves to weep.

—*Bailey*—*Festus*, Sc. *Water and Wood*, *Midnight*.

T. The poet figures Nature as a person who, in the dew-drops, sheds tears; but he is at a loss for the exact reason evidently, for in one breath the tears are figured as shed for the fair that die, and in the next for the absence of the sun. But when an inanimate object is represented as having the feelings of a sentient and emotional person, we have what people call a certain figure of speech. What name would you give to this figure?

S. Personification, I suppose, for it figures Nature as a person.

T. Very good. On a future occasion we will look out for other kinds of figures, and get the names used for them. For the pictures of the poets are known as figures of speech.

### A Little Lesson on Dust.

*How do we know that there is dust in the air?* It is seen in rainwater, on the furniture and in floating rays of sunlight.

*What produces the dust in the atmosphere?* The wind, carriages and other moving objects. It consists partly of the pollen from plants. Furnaces are one source, and this is said to be the reason for the thick, murky atmosphere of London. The dust from the furnaces condenses the moisture in the air.

Volcanic eruptions are another source. Some years ago an eruption took place in Australia, and the dust from this convulsion encircled the entire globe. In some places the atmosphere was blood red, and this caused great consternation among those who thought that the end of the world was at hand. Meteors produce enormous quantities of dust in the air.

*Uses of Dust.*—Condenses moisture. Reflects light; if it were not for the floating particles in the air, there would be no diffusion of light. Absorbs heat, making the air warmer. It is the dust which causes the pretty colors in the sky at sunrise and at sunset, and which gives it the blue color through the day time.—*Sel.*

### In Place of Scolding.

It is now fourteen years since I was visiting a school in one of the outside villages of Utah, a school taught by an Eastern girl. There were nearly one hundred pupils. At the stroke of the desk bell at opening, one child recited some devotional verses, and the whole school repeated them in concert. Then one child recited "the new verse for the week," and all repeated. As they took their books for study, they all recited the verse upon diligence in business. At the calling of the recitation they recited the verse upon striving lawfully.

At recess I was talking with the teacher and her assistant indoors, when some disturbances without caught the teacher's ear, and stepping to the open window, she said, "Who has a good verse for such an hour?" and as with one voice came the reply: "He that ruleth his own spirit is better than he that taketh a city," and quiet reigned at once.

I asked the teacher how she found time for having so much memorizing, for I had discovered that the pupils knew many whole poems and no end of "character truths."

"Why," she replied, "I only take the time I used to spend in scolding in the East. I have not scolded once in two years. When anything goes wrong I think of some verse or motto or selection that is worth memorizing. It is often appropriate, but if not, that makes no difference, and I say, 'Now is a good time for some memory work,' and we all work at it till I feel better, and they are diverted."—*N. E. Journal.*



FOR THE REVIEW.]

**On Grading.**

Never before, since the first boy went to the first school, has there been such wonderful activity along educational lines as there is to-day. Keen-eyed observers are studying the child almost microscopically; associations to investigate the proper relations between parents and teacher are now common; old-time school curricula, unable to bear the strain of changed conditions, are being radically modified; antiquated methods of teaching and school management are giving place to new, and on every hand are to be seen evidences of change and progress. Yet, despite this apparent advance in the efficiency of our schools, there appears to be no corresponding improvement in scholarship. It must be admitted, however reluctantly, that, in too large a percentage of cases the results are not at all such as ought reasonably to be expected. The reasons for this are as plentiful as blackberries. While, on the score of so-called economy, pupils still continue to be taught, fifty or sixty under a single teacher, with little or no opportunity for necessary personal supervision, and by far the greater part of the teaching remains in the hands of practically untrained teachers, no thoughtful student of the subject can be surprised at the unsatisfactory result. But while the causes cited will account for much, of the failure, no small amount of it must be attributed to the *imperfect grading* of pupils in our schools.

The evils which follow in the train of loose and imperfect grading are so numerous and evident, that to be appreciated they need only to be mentioned. How many schools there are where the teachers' efforts are hampered, even paralyzed, by the presence of numbers of unfit pupils! How many intelligent pupils do we see annually, who by being promoted into grades too advanced for them, are forced out of our schools to commence their life-work with no adequate preparation; or often to continue their education as loafers on our streets, and ultimately to furnish recruits for our criminal classes!

A striking but typical example of these evil effects upon pupils thus unwisely advanced, came lately under my observation. A bright, intelligent lad was graded into a school. He had been a careless student and came into the grade with no adequate preparation. Roused by being brought into contact with a large number of new classmates, he struggled manfully, working early and late, coming daily to his teacher for assistance after school hours, and in every way making herculean efforts to do the work his fellow-students were doing with ease. After a month or two he found, what was only too evident, that the task he had set himself was impossible. Completely discouraged, school became

distasteful to him, and, although naturally a frank and truthful boy, he became a truant, and finally had to be withdrawn from school.

But the effect on the earnest and industrious pupils is not less pernicious. These, forming as they do in any well conducted school, the large majority of the pupils, ought to receive most consideration, not only on the principle of the greatest good to the greatest number, but because, owing their success to their industry, they are by far the most deserving class. Instead, however, of receiving the attention and encouragement to which they have an indubitable right, their advance is so hampered by their ill-prepared classmates that not a few fall into careless habits, while even the best fail to reach that height of excellence attainable under proper conditions.

Perhaps the greatest weakness in our schools to-day lies in the inability of teachers to attract and hold the attention of their pupils. Careless grading renders this almost impossible, if not entirely so. With some of his pupils unable to understand his instruction, and the rest already familiar with it, what hope has the unhappy teacher of gaining interested attention? Under such conditions it is quite impossible; disorder and mischief follow, and progress is at an end.

The necessity of strict and careful grading being thus apparent, the next question which naturally demands attention is, "Who is the most fit and proper person to do the grading?" In order to decide wisely what pupils in a grade ought or ought not to be advanced, a minute and accurate knowledge of each pupil is necessary. His special knowledge of each subject of the course, as well as a just estimate of his ability, must enter into the consideration. Who but the teacher, brought as he is daily into the closest and most intimate relations with every pupil, can possibly have this requisite knowledge? To imagine that an examiner, by a single examination at the end of the year, even if it be a careful and comprehensive one, can determine with any degree of accuracy who ought to be promoted, is to the last degree absurd. How much more imperfect must be the result when, as is often the case, the examination is hurried through in an hour or two, and deals with but a few of the subjects of the course?

B. C. FOSTER.

Collegiate School, Fredericton.

(To be continued.)

Always ask your question first, and then name the pupil you want to answer the question. In this way you keep the attention of the whole class, and make the whole class prepare the answer. Too many teachers call on the pupil before asking the question, thus giving an opportunity to all the pupils, save the one reciting, to pay attention or not as it pleases them.—*Sel.*

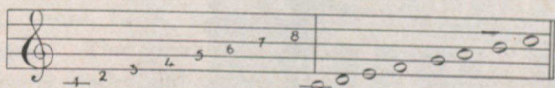


FOR THE REVIEW.]

**Music Lessons in School.—I.**

BY LUELLA E. BLANCH.

There is but one way to begin—say that you *will* have note-singing in your school, and straightway go about having it. Can you sing the scale? Then commence in this wise. Draw a diagram, such as the accompanying, on your board, start with a given pitch, and sing the scale to your class. The short spaces represent the semi-tones. When the pupils have overcome their bashfulness, they will probably render a very loud, very slow, and otherwise very terrible scale, which gives you an opportunity for the first real important step. Insist upon quick, soft tones, always. Have the scale sung up and down every morning, before the morning song, for a month, taking care only that the tones are sweet. Sometimes have numbers sung instead of syllables; sing it frequently to the syllable, *loo*, which is a splendid tone producer. Then introduce the real scale. Draw in place of the diagram, the scale of *c*.



Now always sing the scale from this. Teach the class that the five lines form the staff, that the sign is the *G* clef; that the notes are whole notes. Teach them the terms, bar, measure, and double bar. The following form good manual exercises for Grade III, and higher:

1. Draw staff with G clef, bars, whole notes, double bars.
2. Draw staff with G clef, and scale of C ascending, double bar.
3. Draw staff with G clef, scale of C descending, and double bar.
4. Combine 2 and 3.
5. Copy easy exercises containing any of above.

This will be found sufficient work for at least two months.

The ability to draw ordinary objects has a value in the schoolroom which can hardly be over-estimated. Yet there are tens of thousands of teachers who are unable to draw even in the crudest manner the most simple things. The day is near at hand when some knowledge of drawing will be required of every teacher. The art is easily learned. Anyone can, by the help of a good manual, learn enough of sketching to make the primary class-room a delightful place. The time to begin the study is now.—*Western School Journal*.

FOR THE REVIEW.]

**The Old Mill.**

After long years apart, I and the mill,  
My friend of boyhood, met again, and still  
The skurrying water in the flume was flashing,  
And o'er the rumbling wheel, and never quiet,  
Scorning its narrow bounds with noisy riot,  
Was dashing, splashing, crashing.

The old mill cried "Why! Bless my eyes!  
" 'Tis Bill: I swan I'm taken by surprise."  
And then, with clatter, clatter, chatter,  
It asked, "Old fellow did you choose  
"Those togs?"—and wildly shouted—"Who's  
"Your hatter, hatter, hatter?"

"Excuse me lad; 'tis only chaff;  
"We country folk must have our laugh  
"And chatter, chatter, chatter:  
"But surely Bill, as I'm a sinner,  
"You're not the man you was; you're thinner;  
"You once was fatter, fatter, fatter.

"What have you been about since last we met?  
"How many years ago I quite forget;  
"And tell me what's the matter, matter, matter?  
"For dollars you've been toiling far too keen;  
"Or else, although I hope not, you have been  
"Upon the batter, batter, batter.

"I wouldn't trust the city chaps a mite,  
"For though they seem soft spoken and perlitte,  
"They only flatter, flatter, flatter;  
"And, if they find you're getting rich,  
"Be sure you'll find their fingers itch  
"Your coin to scatter, scatter, scatter.

"Some say that life upon a farm is flat;  
"But often those who quit their farms learn that  
"Life in a throng is flatter, flatter, flatter;  
"And, when at length the bubble's burst,  
"Know that the better lot was first,  
"The worse the latter, latter, latter."

Thus moralized my friend, while I  
Attentive stood, till clouds obscured the sky,  
And sudden rain began to patter, patter, patter:  
But though I walked both far and fast,  
The mill seemed talking to the last,  
In sotto voce, clatter, clatter, clatter.

I. ALLEN JACK.

St. John, N. B.

Formal examinations are inconsistent with real spontaneous interest in any subject. \* \* \*

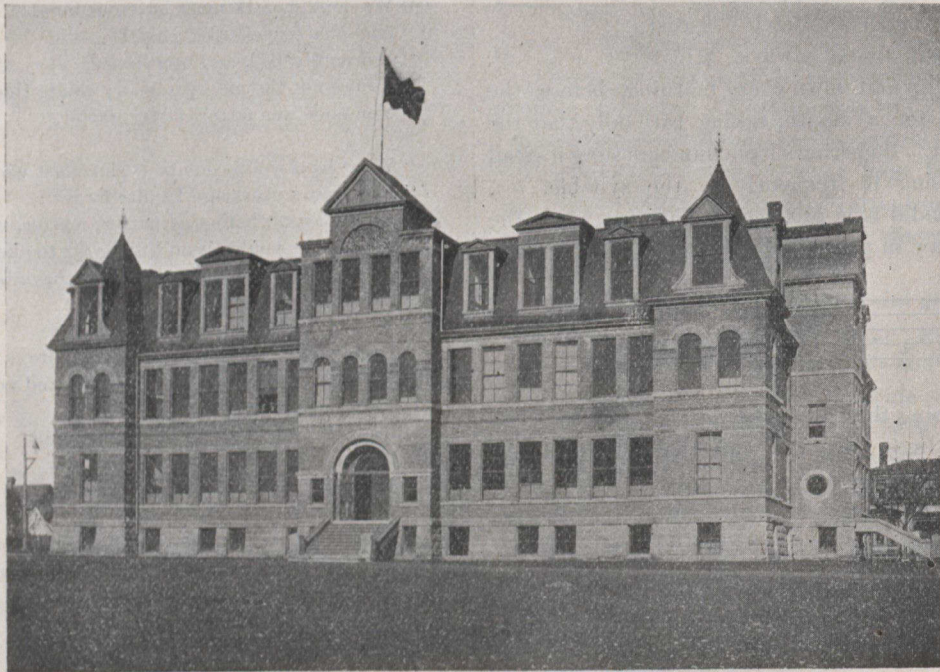
The first duty of the teacher (of literature) is to give his pupils abundant opportunities to read good books. Reading must begin early and must never cease.—*Samuel Thurber*.



**Aberdeen School Building, Moncton, N. B.**

The new high school building recently opened in the city of Moncton and now occupied for school purposes, is situated on the site of the central grounds which were formerly occupied by a number of small wooden school buildings which, being utterly inadequate to the requirements of the times and to the growing population of Moncton, it became necessary that a new and commodious up-to-date building should be erected; that has been done. Moncton to-day has one of the best equipped, largest, and most commodious school buildings in the Maritime provinces. It is constructed of brick and stone, having a frontage on School street of 129 feet

with one end of the laboratory is a large store-room properly shelved for apparatus and chemical materials. The halls of the building are a striking feature, being exceedingly wide, admitting of eight abreast marching through the hall. The stairways are of ample and easy ascent; four abreast can march at ease and up the stairways. The building is so constructed that there are three avenues of descent from each flat, so that in the space of one minute, the occupants, nine hundred, can be dismissed from the building in case of emergency. Ample precaution has been taken against fire accident. Through the basement and three storeys is a standing water pipe, with hose attachment in each flat. There is also provided in each flat a chemical fire extinguisher



and on Botsford and Alma streets, 90 feet. It is three stories high, besides an elaborate basement. It contains seventeen class-rooms, the average size of which is about thirty-five feet square, a large assembly room capable of seating six hundred adults, a library room, officers' room, and two rooms for the teachers. The laboratory is situated in the basement, being well lighted and ventilated; it contains pneumatic troughs; twenty-four, set upon tables, about which forty-eight pupils can successfully work at one time. The tops of the tables are made of terra cotta set in plaster paris. Gas jets with bunsen burners are furnished for each pupil, also a set of drawers in the table for each pupil. There are also fitted up four foul air chambers with glass fronts for operating with obnoxious gases. Connected

for putting out incipient fires. Connected with the principal's room by rolling doors is the natural history room which is shelved and protected by glass for the reception of natural history specimens. In this room also is the large sink, also tables upon rollers capable of being moved into the main room, thus enabling the principal to demonstrate small experiments before the school without going to the laboratory in the basement. The furniture of the entire building is a striking feature as it is uniform throughout, being the latest, and in the opinion of the board of trustees, the best school furniture that can be furnished, being the automatic ball-bearing desk which is noiseless in its action and apparently very strong and comfortable. It was furnished by the Canadian Office and School Furniture



Company, of Preston, Ontario, and gives entire satisfaction. The building is lighted by the electric light, and a system of electric bells connects the principal's room with the others. The heating and ventilating system, which is that of the "Record Foundry and Machine Co.," of Moncton, embraces a system of hot air ventilation in which nine furnaces are made use of in the basement. Attached to each are fans driven by water motors for the purpose of forcing the air through the building. This system at present seems to work very successfully.

The interior of the building is finished in white wood and native spruce, which gives a very bright and pleasing effect. About nine hundred pupils are accommodated in the building and there are at present one hundred and eighty-two pupils in the high school.

The contractors for the building were Messrs. Rhodes, Curry & Co., Limited, Amherst, and the architect Mr. J. C. Dumaresq, of Halifax. Mr. C. Rowe, of Moncton, put in the plumbing. The whole cost of the building and equipment is \$40,000. The building committee, who had under its direction the erection of the building consisted of the following members of the board: H. H. Ayer, chairman; Mrs. Emma R. Atkinson, Mrs. Hannah Nugent, D. Grant, L. N. Bourque, W. H. Martin, James Flanagan. The grounds about the building have been nicely graded and asphalt walks have been laid around the building and each approach. One of the rooms in the building is now being used with the permission of the board for a kindergarten school-room. This is not in connection with the public schools; the board merely allowed the use of the room to be given to a kindergarten teacher at the request of a number of the citizens of the town, who, at their private expense, are supporting a kindergarten teacher.

The building was commenced over a year ago and today is complete in every department. The board of trustees, through Mr. Oulton, has made a liberal purchase of physical and chemical apparatus for the high school. This apparatus has been placed in the school building during the present session. In recognition of the efforts of the citizens of Moncton to have in their city a modern and up-to-date school-building and a well-equipped staff, the board of education have constituted this school henceforth the "Grammar School for the County of Westmorland."

A description of the grammar school building in Moncton would not be complete without some reference to the thorough and capable staff of teachers in the high school and other departments. The Principal of the school is Mr. Geo. J. Oulton, M. A., who gives special attention to the science subjects and in connec-

tion with which he is now taking a special course in the McGill university. His subjects are now taken by Mr. Frank Allan, B. A., the former Principal of the grammar school at Shediac. Mr. H. L. Brittain, M. A., is now very creditably filling the position of principal of the school in Mr. Oulton's absence. His subjects are history, current events, civics, etymology, drawing, algebra. Mr. H. A. Sinnott, B. A., former principal of the grammar school at Gagetown, teaches Latin, Greek, French, arithmetic, geography, book-keeping. Miss Susie W. Gray, B. A., is the teacher of English literature, grammar, analysis, essay work, Canadian and British History.

### The Heavens in December.

The advance of the winter constellations up the eastward slope of the sky during December is one of the most sublime spectacles that the heavens afford to the contemplation of the earth's inhabitants. Taurus, as forerunner of the great company, appears early in the evening, rising with a backward motion, like a leader turning to face his marching orchestra, with the swarming Pleiades a-glitter on his shoulder and Aldebaran glaring red beneath the upraised club of Orion. Behind his back, and high overhead, are Pegasus and Andromeda, while Auriga, with the brilliant Capella, out-rivaling Aldebaran in splendor, keep abreast of him in the northeast. Between Auriga and Andromeda soars Perseus, hero of the diamond sword and winged sandals, with Cassiopeia close by, toward the pole. In the meantime, Cygnus, Lyra and Aquila are retiring adown the western sky, the Northern Crown is poised on the horizon, and Ursa Major shines under the pole. An hour later, Orion and Gemini, advancing with even stride, having the Galaxy stretched between them, appear in the east and northeast, and with their coming a shimmering light seems to break over the sky. Orion, on a clear night, flashes with extraordinary brilliancy. His two great first magnitude stars, Rigel and Betelgeuse, with their contrasted colors; his glowing Belt, which was once the constellation of Napoleon, and the glittering surroundings of his wonderful nebula, all uniting to accentuate his magnificence. Still later, following Orion and Gemini, appear Cancer, with its beehive cluster of stars (now honored with the presence of the planet Mars), Canis Minor, with the great star Procyon, and, chief over all the starry host, imperial Sirius, a star so great and splendid that it alone stands for a whole constellation, and outranks even Orion with all his celestial jewels.

These constellations afford a feast of beauty and many dazzling surprises for the observer with an opera



glass. Let the glass be of the first quality and not too small, and look especially at the Pleiades, the Hyades (of which Aldebaran is chief), the Belt of Orion, and the neighborhood of the Great Nebula.

Venus, which was so brilliant in October and the first part of November, passed between the earth and the sun on the 1st, and becomes a morning star. She remains in Scorpio throughout the month.

Mars is attracting attention once more, glowing with his characteristic reddish hue, and rising, at the opening of the month, between 8 and 9 o'clock in the evening. He is in the constellation Cancer, and was conspicuous to the eyes of all who watched for the Leonid meteors in November. The earth is rapidly approaching him and he doubles his brightness between the 1st and the 31st. The planet's north pole is inclined toward the earth.

Jupiter, in the constellation Virgo, is a morning star, rising at the beginning of the month about 4 a. m., and at the end about 2 a. m.

Saturn, in the constellation Ophiuchus, is in conjunction with the sun on the 6th, after which date it becomes a morning star.

Uranus, in Scorpio, is a morning star, but too close to the sun to be visible.

Neptune in Taurus, just above Orion, is well placed for observation with telescopes, being in opposition to the sun on the 15th.

There will be a partial eclipse of the sun, invisible, on the 12th, and a total eclipse of the moon, visible on the 27th, the moon rising in eclipse.

#### Teachers' Conventions.

The Carleton County, N. B., Teachers' Institute was held at Hartland on the 27th and 28th October. The excellence of the papers read and the spirit with which they were discussed, made the meeting a useful and interesting one. M. A. Oulton read a paper on Bird Life, in which he spoke of the importance of studying the habits, etc., of birds from observation; Child Study was the subject of a paper by Miss Jane Kinney, in which the importance of sympathy between teacher and pupil was strongly urged; H. T. Colpitts read a paper on The Teacher as a Factor in the Community, in which he advocated the formation of literary societies, and the study of special subjects in which the community was interested; Miss Julia Neales read an instructive paper on Grammar; Mr. F. A. Good on the Natural History of a Gully-bank, and Mr. G. H. Harrison on Canadian Literature, a paper which called out a most interesting discussion. Mr. Good's plan of interesting his pupils in natural history was to visit a gully-bank in

the vicinity of Woodstock every week from the last week in April onward during the spring season, noting the growth of plants, and making the peculiarities of structure, time of blossoming, occurrence and variety of species, the subjects of lessons. It would not be difficult for every teacher to have such a "wild garden," and make it the annual starting ground for plant lessons. There would certainly be a great deal of useful work and pleasant associations from such wayside studies.

At the public meeting on Thursday evening, Inspector Meagher delivered an excellent address on the state of education throughout his inspectorate and the necessity of consolidation of schools in order to derive all the advantages obtainable from our system of education. Departments for manual training could be established in connection with such central schools that would help to make our educational service more complete.

The Institute adjourned to meet at Hartland again next year.

The following officers for the ensuing year were elected: President, C. H. Grey; vice-president, M. A. Oulton; secretary, Miss Mina Fisher; additional members of the executive, R. Cormier and Miss Katie Cormier.

#### QUEENS AND SUNBURY INSTITUTE.

The sixth session of the Queen's and Sunbury Counties (N. B.) Institute met in the grammar school, Gagetown, on Thursday, October 27th. Inspector Bridges presided, and read a paper by the retiring president, Mr. Veazey. The meeting was small, owing to the stormy weather. Papers were read as follows: by Mr. Ernest Straight, on Making Ourselves understood; by Miss Sadie Thompson, B. A., on Teaching First Steps in Geometry; by Principal D. L. Mitchell, B. A., on English in the Primary School; by Mr. C. E. Gaunce, on The Child: Its Moral Training; by Mr. G. Foster Thorne, on the Importance of Teaching Current Events.

The Institute decided to meet next year with the York County Institute.

The following officers were elected for the present year: Inspector Bridges, president; Alva White, vice-president; Miss Annie L. Briggs, secretary-treasurer; D. L. Mitchell, B. A., Miss Sadie Thompson, B. A., additional members of the executive.

Literature is a record of the best that has been thought and felt in the world, the most complete image of the soul and the most powerful earthly help to the living.



## CHRISTMAS-TIDE.

### Scene of the First Christmas.

"The place is Bethlehem, but the Holy Family are no longer at the inn, in which 'there is no room' for them," writes Rev. Amory H. Bradford, D. D., in the December *Ladies' Home Journal*, of "The First Christmas Present." "They are now in a house and by themselves. The dwellings of the poorer classes of that land and time were of primitive simplicity. The walls were of stone, often without cement or plaster; the roofs were of boughs or poles laid side by side and covered with mud and straw; the floors were of earth. They contained few rooms, if, indeed, there were more than one, and no windows such as are to be found in modern houses. The best of these buildings were hardly more sumptuous than the dugouts of the American prairies or the crofters' cottages of Scotland and Skye, but because of the dryness of the climate they were not uncomfortable. Neither walls nor floors were damp. Jesus and Mary were in such a house, and were as well provided for as most other people of their time and their means.

"The strangers who appeared in the streets of that little town were wise men from the East. They were guided by a mysterious star. They sought one who was 'born King of the Jews.' When they found Him, in true Oriental fashion they first bowed their heads to the ground in salutation, and then presented to Him gold, frankincense and myrrh. The phrase 'wise men,' or Magi, indicates that they came from Persia or Arabia; that probably they were followers of Zoroaster, and therefore that they were fire-worshippers. This is all that the Gospels teach us, either directly or by inference, concerning them."

THE FIRST CELEBRATION OF CHRISTMAS.—Christmas was first celebrated in the year 98, but it was forty years later before it was officially adopted as a Christmas festival; nor was it until about the fifth century that the day of its celebration became permanently fixed on the twenty-fifth of December. Up to that time it had been irregularly observed at various times of the year—in December, in April and in May, but most frequently in January.—*December Ladies' Home Journal*.

### Christmas in the Schoolroom.

(Condensed from *School Education*.)

Let the celebration of Christmas take up a portion of each day, for weeks before the close of the school. We can begin each day with the thought of the Christmas time by weaving song, story, or Bible record into our opening exercises. Let the children look upon the learning of quotations, the repeating

of memory gems not as a task, but as a pleasure, an overflowing of the love and joy that is within us at the blessed Christmastide, and which occasionally wells up to the surface. Some simple carols, some story, such as Dickens' "Christmas Carol," with its central figure, Tiny Tim, or "The Birds' Christmas Carol," by Wiggin; the story of the wonderful birth of the child in the manger will touch the right chords of feeling in the children's hearts, and in our own, and we shall be more ready for the real Christmas when it comes, more full of the real Christmas feeling because of this preparation.

If the pupils have Christmas trees and many gifts from loving friends at home, the tree with all its burden of preparation, which sometimes taxes a busy teacher far beyond her strength, may well be done away with, and the time and energy bespent in other directions. If, however, the influence of the approaching season is such as to fill the children's hearts with the desire for giving, to make others happy, the teacher may be able to gratify the enthusiastic givers, and yield to their desire for a "real Christmas tree in the schoolroom," if they, in their turn, will agree to do all the work of preparation, and take all the responsibility. In such a case have committees appointed by the school, one for the tree, one for gifts and one for the entertainment. This arrangement should be made with the stipulations that no child shall be omitted from a share in the entertainment, and that the committee on presents shall see that each pupil receives a gift.

Every schoolroom should have a picture of the Madonna and Child (the picture sent with this number of the REVIEW is a very attractive one).

Writing and committing to memory sentiments appropriate to the day, supplementary readings of anecdotes, stories, poems, by the children; lessons on the geography and history of the Holy Land, and on countries where Christmas is celebrated, may be woven into other exercises without interrupting to any extent the regular work of the school.

Success to you in your Christmas celebration. A merry Christmas to you and to your pupils. And may Tiny Tim's benediction fall on us all this Christmastide, "God bless us, every one."

### The Dream of the Toy.

The Sandman lost a dream one night—  
A dream meant for a boy;  
It floated round a while, and then  
It settled on a Toy.

The Toy dreamed that it stood in class  
With quite a row of boys;  
The teacher rapped upon his desk  
And cried, "Less noise! less noise!"

Then, looking at the Toy, he scowled  
And said, "Next boy—foretell."  
"Oh, please sir," cried the little Toy,  
"I don't know how to spell."



"Indeed, I don't know how it is,  
I'm sure I am a toy,  
Although I seem to be in class,  
And dressed up like a boy."

"What's that? What's that?" the teacher cried—  
In awful tones he spoke;  
He came with strides across the floor,  
And then the Toy awoke.

There lay the nursery very still,  
The shelf above its head;  
The fire burned dimly on the hearth,  
The children were in bed.

There lay the dolls and Noah's Ark.  
"Oh, dear me," said the Toy,  
"I just had such a dreadful dream!  
I dreamed I was a boy."

—Katherine Pyle in the *December St. Nicholas*.

### The Christmas-Tree Lights.

When holiday week is almost over,  
And broken are some of the toys,  
When Christmas-tree needles are dropping,  
And drums will not give out a noise.

When some one has said, "It's a nuisance:  
This tree *must* be carried away,"  
And we stand around and look gloomy,  
And beg for it "just one more day."

There's one thing that keeps up our spirits:  
The best of the week's merry nights  
Is just at the last, when we children  
May blow out the Christmas-tree lights.

The little tots, Doris and Douglas,  
They blow out the ones lowest down  
Their faces get redder and redder:  
Their foreheads are all in a frown.

Then Alice, the next high by measure,  
Puts out all the candles half low;  
And then I, the oldest and tallest,  
I blow, and I blow, and I BLOW!

But even I can't reach the top ones,  
So father lifts up Baby Grace:  
Her dear little mouth is a circle,  
All wrinkled her sweet little face.

She blows out the tiptopmost candles:  
We clap and hurrah when she's done;  
And that is the end of the Christmas,  
The very—last—bit—of—the—fun!

\* \* \* \*

But all through the year it's a pleasure  
To think of our holiday nights—  
The best coming last, when we children  
May blow out the Christmas-tree lights.

—Annie Willis McCullough in *December St. Nicholas*.

### School Hours on the Yukon.

Miss Anna Fulcomer, in a recent article in the *Century Magazine*, has given to the public a singularly interesting narrative of her school-keeping experience in Circle City, on the Yukon. School-houses, scholars and school methods were all odd enough, but perhaps nothing else strikes the reader as quite so queer as the school hours in that far-away region of the North.

During the short winter days, says Miss Fulcomer, it would often be noon before all the children put in an appearance. When I arrived at nine o'clock it would either be dark or brilliant moonlight. I would light one lamp and wait.

By ten o'clock a few children would straggle sleepily in, just as day began to dawn. By eleven o'clock, shortly after sunrise, the majority of children were at school, some coming without their breakfast. By half-past twelve all who were coming that day would have appeared. It was hard to get up before daylight on those cold, dark mornings.

It was necessary to light the lamps by half-past one, which was trying on the eyes, as we could not get enough lamps to light the large room. The children would crowd about the lamps sitting on the floor, platform and seats.

A visitor might get the impression that there was little order in the school, but strict order was a necessity. Perhaps one reason why I liked the school so much was because it kept me so busy. Recess was limited, in order to make up for the tardiness of the morning.

After half-past three, fifteen or twenty of the little ones were sent home. If it was moonlight, they would run away noisily over the snow. If it was dark, the more timid ones would take my hand and whisper: "Please, I want to go with you."

Most of the children were so used to the dark that they did not mind it much. The majority of the nights, though, were filled with glorious moonlight. It seemed to me that for days at a time the moon never set. It would shine through the day about as bright as did the weak, pale sun. For about three weeks the sun would slowly rise in the south, skim along for a short distance, its lower rim almost touching the horizon, and then drop suddenly out of sight.

When at length the days grew longer and sunbeams began to steal in at the school-room windows, the children greeted them with shouts of welcome, fairly dancing with delight, and running to the window sill to lay their cold little hands in the warmth and brightness.

[This may be read to the pupils and form an introduction to a series of short interesting lessons on the short days and long nights of December. Let the scholars find the length of our days. Draw their attention at noon-day to the comparatively short distance of the sun above the horizon; get them to note where the sun rises and where it sets, and draw imaginary arcs in the sky to show the sun's course from day to day. Will this arc be always the same? Compare such an arc with the sun's course as seen by one of the children on the Yukon. How would this arc appear to one



farther north? How at the North pole? This is an interesting problem and can be worked out with the aid of a globe or even with a ball on which is marked the poles and the circles dividing the different zones.

Other interesting suggestions are contained in the references to the almost constant moonlight and to "the weak, pale sun."—ED ]

For the REVIEW.]

### English Literature in the Lower Grades.

THE CUCKOO—ROYAL READER, No. IV, PAGE 45.

This little poem was written by a young Scottish poet who died more than one hundred years ago, when he was only one and twenty. He was the son of a poor weaver, and often, in summer, instead of going to school, he had to stay out on the hills and watch the cattle. His short life was sad, for he was poor, sick and lonely; but he found many pleasures in the country scenes around him. These verses tell us how he loved the warmth and brightness of the spring-time, and the birds and flowers.

The poem is a song of welcome to the cuckoo, as the one on page 29 is a song in praise of the sea-gull. Such poems are called *lyrics*.

What other poems about birds can you find?

The cuckoo has been made very famous in English songs and stories, because it is especially the bird of spring, which is always a welcome season. But the cuckoo does not come to this country. What birds are the messengers of our spring-time? Do you boys and girls who live in the country notice the coming or going of birds and their songs as closely as this Scottish boy did?

To read about our birds and flowers and seasons we have to turn to the writers who live in our part of the world.

Notice all the different names that the poet gives to the cuckoo, and the flowers that he speaks of.

What does "What time" mean in verses 2 and 5? Explain "the rolling year." What does guide the path of the cuckoo?

An American poet, William Cullen Bryant, wrote a beautiful little poem called "To the Waterfowl," in which we find the following lines:

"He who from zone to zone  
Guides through the boundless sky thy certain flight,  
In the long way that I must tread alone  
Will lead my steps aright."

If we had "no winter in our year" should we enjoy the spring-time?

Compare the length of these lines and verses, and

the arrangement of the rhymes, with those of some other poems in this book.

Sometimes words beginning with the same letters are placed close to each other, for the sake of the sound, as in "Woods they welcome sing," and "The daisy decks the green."

This arrangement of words is called *alliteration*. How many examples of it can you point out?

The next poem in the book, "The Loss of the Royal George" is very different.

How many things have been written about lost ships! This poem, and "The Burial of Sir John Moore" and the "Birkenhead" are alike in what way? This kind of poetry has its special name too. It is *elegiac* poetry, and there have been many beautiful pieces of it written. Notice how briefly and simply the story of the terrible catastrophe is told. There is not a word wasted.

Who were "England's foes" in 1782?

What is "England's thunder"? Name some other people to whom England "owes a tear."

In the line "And plough the distant main," we have the figure of speech called *metaphor*. In metaphor two things are compared, but only one of them is named; but in *simile* both are expressed. To be sure that you understand a metaphor, turn it into a simile. For instance: The ship turns up the water as a plough turns up the land.

The man who wrote this elegy lived from 1731 to 1800, and wrote many fine poems. He suffered a great deal from ill health and low spirits, but he was very patient and kindly, and his friends loved him dearly. He was very fond of animals and passed many happy hours with his pets. If you care about cats and dogs you will enjoy and laugh over "The Colubriad," "The Retired Cat," and "The Dog and the Water Lily."

Besides many other poems, including the one that everybody knows, "The Diverting History of John Gilpin," Cowper wrote some of our best-known hymns, such as "There is a fountain filled with blood," and "Hark, my soul, it is the Lord." E. R.

"Teachers would subscribe for last year's almanac at twenty-five cents a year rather than for the best educational magazine in the world at a dollar."—*School Superintendent*.

"It is a pretty bad commentary on the intelligence and interest of public school teachers that a cheap, almost worthless, school journal can command a large circulation."—*Supervisor of City Schools*.

No, gentleman, you are both wrong. It is some occupant of a teacher's chair you have in mind, not a teacher.



### Spelling Exercise.

The following list was prepared for a Teachers' Institute. Sixty-five teachers took part in the trial and but one made perfect marks. Give the list to your pupils.

Preparation,	separating,
parallel,	emanate,
precedent,	leisure,
intercede.	emigrant,
liniment,	repetition,
brigadier,	supersede,
inflammation,	weird,
tranquillity,	immigrant,
received,	stratagem,
wield,	jealousy,
seizing,	strategy,
reprieve,	diphtheria,
accessible,	orifice,
siege,	sacrilegious,
stationery,	symmetry,
icicle,	anonymous,
satellite,	exaggerate,
aqueduct,	herbivorous,
permanence,	siphon,
conscientious,	inference.

### Time to Go.

They know the time to go!

The fairy clouds strike their inaudible hour  
In field and woodland, and each punctual flower  
Bows, at the signal, an obedient head,  
And hastes to bed.

The pale anemone

Glides on her way with scarcely a "good-night;"  
The violets tie their purple night caps tight;  
Hand in hand the dancing columbines,  
In blithesome lines

Drop their last courtesies,

Flit from the scene, and couch them for their rest;  
The meadow-lily folds her scarlet vest  
And hides it 'neath the grasses' lengthening green;  
Fair and serene.

Her sister lily floats

On the blue pond, and raises golden eyes  
To court the golden splendor of the skies.  
The sudden signal comes, and down she goes  
To find repose

In the cool depths below.

A little later and the asters blue  
Depart in crowds, a brave and cheery crew;  
While golden-rod, still wide awake and gay,  
Turns him away,

Furls his bright parasol,

And, like a little hero, meets his fate.  
The gentians, very proud to sit up late,  
Next follow. Every fern is tucked and set  
'Neath coverlet,

Downy and soft and warm.

No little seedling voice is heard to grieve,  
Or make complaint the folding woods beneath,  
Nor, lingering, dare to stay, for well they know

The time to go.

—Selected.

Can any of our readers tell us the author of the above?—[Ed.]

### The Craze for "Supervision" in Education.

I believe the playground is abolished because it interferes with that deadly order and craze for supervision which is sought for as the prime condition both inside and outside the schools. Order of a wholesome sort is not inconsistent with the free recess of a big school. I watched in Los Angeles a great school as it was marshalled out to play and back again at the sound of the drum. After a quarter of an hour of unrestrained sport, several hundreds were gathered in lines at the tap of the drum, facing the cheerful school-house in the mild bright sun, their faces radiating contentment and good will while they straightened up at the mere hint of the teachers on duty. In San Francisco I once found a certain primary school keeping doll's day, when every girl brought her doll to school and exhibited her at recess. The school yard was a barren enclosure within a high board fence, but a joyful place to that young company. To what purpose are teachers urged to study psychology? The children in their seats are emptied of everything that pertains to their souls. Not to study, because the teacher will explain everything, and behave just well enough to get safe out of school, is the simple code which covers the conduct of average children. To extend this code to ideas of social duty—the highest—is not possible while they do not form a society.—From *The Playgrounds of Rural and Suburban Schools*, by *Isabella G. Oakley*, in *Appleton's Popular Science Monthly* for December.

LET every teacher act in a business way concerning a paper. But few take a paper and then refuse to pay for it. They see that such a course is dishonest. When the first bill comes in they act—they send money to pay for it, and if they wish it stopped they send word to that effect. Some subscribers will say, "I never ordered the paper after the first year;" but if they go on receiving it from the office they are liable for its payment. It is the same as a milk bill or a gas bill. The consumer is liable for what he receives and uses, although he may not renew his order every month. Again: some remove from a place, or give up teaching, without sending word to the publisher to have the address changed or the paper discontinued. This is often the result of carelessness or ignorance, but it entails trouble and loss to the publisher. The best way is to be business-like. If you owe for a paper pay for it. If you want your paper stopped write frankly to the publisher and tell him so.

OUR readers should examine this issue of the REVIEW throughout—advertisements and all.



**CURRENT EVENTS.**

The peace commissioners of the United States and Spain have concluded their tedious negotiations at Paris. Several times the Spanish commissioners were on the eve of retirement, but they have accepted the inevitable. This means that Spain has relinquished her claims to Cuba, Porto Rico, and the Philippine Islands. As a compensation for the cession of the latter the United States will pay Spain twenty million dollars. The treaty has yet to be ratified by the United States Senate and the Spanish Cortes. What will be the future of these possessions lately held by Spain, whether they will be formed into self-governing colonies, or dependencies of another nation, is not yet determined. In either case the United States will have the controlling voice in their future government.

The joint Anglo-American high commission is still holding sessions at Washington, whither it adjourned after the Quebec meeting. The adjustment of disputes of long standing between the two countries is looked forward to with satisfaction as the result.

The new Governor-General of Canada, the Earl of Minto, took the oath of office in the parliament house at Quebec, on Nov. 12th, Lord Aberdeen presiding. On the same day the latter, who has been Governor-General of Canada since 1893, sailed for Europe with his family. The Earl of Minto, Gilbert John Eliot-Murray-Kynmound-Eliot, was born in 1845, and married a daughter of the late General Charles Grey. Their eldest son, Viscount Melgund, is about seven years of age. The Earl has been an officer in the Scots Fusilier Guards, was a volunteer in the Egyptian campaign of 1882, and recently commanded the South of Scotland Volunteers, with the rank of Colonel.

Canada can now boast of having no less than three of her sons, native and to the manor born, sitting in the British House of Lords. These are Baron Haliburton, recently elevated; the Earl of Carnwath and the Earl of Elgin. The last named peer is now returning to England after having successfully governed the great empire of India for five years, a territory larger than the continent of Europe without Russia. According to Morgan's Canadian Men and Women of the Time, His Lordship was born at Monklands, near Montreal, May 16th, 1849, was educated at Oxford and succeeded his father who has been successively Governor-General of Canada and of India, November 20th, 1863. He had previously held office as Treasurer of Her Majesty's household and First Commissioner of Works.

Only seventy years have elapsed since the first railway in the world was finished. During that comparatively brief period 400,000 miles have been constructed, the British empire accounting for about a sixth.

The foreign trade of Canada has increased in the last thirty years from \$131,027,532 to \$257,168,862. The output of minerals in 1887 was \$11,118,000; in 1897 it was \$28,500,000, an increase of over 150 per cent in ten years! The business failures in Canada in 1877 showed liabilities of \$25,523,000; in 1897 only \$13,147,929, a decrease of nearly 100 per cent in twenty years. On the 30th September, 1898, there was on deposit in chartered banks in Canada \$238,573,704, against a little over \$100,000,000 ten years ago. The bulk of loans and discounts has increased over \$80,000,000 in ten years, showing increased business. The deposits in Savings banks in 1887 amounted to \$51,000,000; in 1897 to \$64,000,000—not a great increase but showing that people are preferring to invest their money rather than loan it to the government at three per cent. Teachers, put these figures on the black-board. At this season of peace and contentment it will help to beget an honest pride in our country, and be a stimulus to every youth to do his share in helping to build it up.

In the centre of the Andromeda nebula, Dr. Seraphim, of the Russian observatory at Pultowa, has discovered what appears to be a starlike condensation. It is probable that a new star is in process of evolution.

**'ROUND TABLE TALKS.**

L. H. To answer your questions on English Grammar would take up more space than we can spare in this number. All these questions and others like them are answered satisfactorily and fully in a good elementary grammar such as West's, price fifty cents, published by the Copp, Clark Co., Toronto.

"A Constant Reader" is reminded that she must send her name in confidence to the REVIEW or no notice can be taken of her request to publish a solution of the problems in geometry. As she may need these solutions we will send them at once on receipt of her address.

I. H. The solution to the arithmetical exercises which you send has been already published in the REVIEW (Feb. and Sept. 1894). As you may not have either copy at hand we have sent the solution needed to your address.



YARMOUTH.—Are the answers given in Hamblin Smith's Arithmetic, to the below mentioned exercise, correct? If so, please publish solutions.

1. Exam. Papers, page 184, Set IV, Ex. 4.
2. " " " 197, " V, " 5.

(1) A offers \$8,000 for a farm; B offers \$9,500, to be paid at the end of 4 years. Which is now the better offer, and by how much, allowing 5 per cent. compound interest?

$$\begin{aligned} \text{Amount of } \$8,000 \text{ in 4 yrs.} &= 8,000 \times (1.05)^4 \\ &= \$9,724.05 \end{aligned}$$

$$\begin{aligned} \text{Therefore A's offer is better by } & \$ (9,724.05 - 9,500) \\ &= \$224.05. \end{aligned}$$

(2) A man obtained an insurance for life at the age of 37, and died when 51 years old. The policy required annual payments during life at \$2.8674 per \$100, and secured to the heirs \$1,709.69 more than the amount of all the premiums paid. What was the face of the policy?

$$\begin{aligned} \text{Cost of } \$100 \text{ insurance} &= 15 \times \$2.8674 \\ &= \$43.011 \end{aligned}$$

$$\$56.989 = \text{Gain on } \$100 \text{ insurance}$$

$$1 = \frac{100}{56.989}$$

$$1,709.69 = \frac{1,709.69 \times 100}{56.989}$$

$$= \$3000 \text{ nearly.}$$

QUERIST.—Is  $x^4 \div 4y^4$  a factorisable quantity and if so what are its factors?

Will some of our readers answer this question?

### SCHOOL AND COLLEGE.

A noteworthy addition has been made to our matriculation standard by rendering it necessary for candidates to pass an entrance examination in either French or German. The importance of a knowledge of these languages is becoming more and more recognized each day, and we must all feel that this measure marks a decided forward step in the history of our *Alma Mater*.—*King's College Record*.

We acknowledge that this is a step forward, but it would have been a step upward as well if laboratory work in science had been substituted for French or German.

The Church School for Girls at Windsor has 78 pupils, 72 of whom are boarders. This institution was never before in so prosperous a condition.

Mr. N. W. Brown, principal of the Superior school, Dorchester, N. B., received a handsome farewell card from their Excellencies Lord and Lady Aberdeen in recognition of the courtesy extended to them on visiting the school this year.

A Teachers' Association has been formed at Stanley, York County, under the presidency of Mr. W. L. McDiarmid. Teachers from this and adjacent districts meet regularly for the discussion of plans of school work and other educational questions.

Prof. Andrews, of Mount Allison University, that man of wonderful resources and endless ingenuity, has converted the windows from the Methodist church into a gothic hen house,

which will make the biddies an extremely warm and sunshiny home for the winter. Mr. Andrews is well satisfied with the job, but is now beset with doubts as to whether the hens after occupying an ecclesiastical dwelling will still belong to the laity.—*Sackville Post*.

The Lunenburg *Argus* publishes a fine cut of the Lunenburg Academy, and calls attention to some interesting facts in connection with its history. It is stated to be "unquestionably the finest wooden building for school purposes in the Maritime Provinces. Its heating, ventilating and sanitary system is up to date, and gives perfect satisfaction. The laboratory is furnished with a supply of physical and chemical apparatus sufficient for the work required in grades B, C and D, and all the students have an opportunity of carrying on practical laboratory work. The library contains three of the best physiological and geographical charts published. There is a very creditable cabinet of mineralogical specimens, and a good collection of fossils. Of the 94 successful candidates from the whole county (July provincial examination) 38 were from this academy, viz., 6 B's, 17 C's and 15 D's. The academic staff consists of E. MacKittrick, B. A. (Dal.), Principal and teacher of mathematics; and A. H. Roop, M. A. (Acad.), vice-principal and teacher of English and classics.

Principal Brown and his two associates, Messrs. Welling and Girouard, of the Superior school, Dorchester, N. B., have tendered their resignation, to take effect at the close of the present term. Mr. Amos O'Blenus, of the Superior school, Salisbury, well known as a teacher of experience and skill, will take Mr. Brown's place.

The REVIEW extends congratulations to Inspector G. W. Mersereau on his promotion from the rank of captain to major in the 73rd Northumberland battalion.

The York County, N. B., Teachers' Institute will meet at Fredericton on Thursday and Friday, December 22nd and 23rd.

### RECENT BOOKS.

To write a book on Love<sup>1</sup> is not the task that we would expect from one who is busily engaged in the world of politics or in such a practical, matter-of-fact profession as the law, but we find a man busily engaged in both, the Hon. J. W. Longley, Attorney General of Nova Scotia, putting aside the severer cares of the one, and the duties of the other, to express his views on this subject, and he does so with a courage that springs from the conviction that he has a message to deliver to his fellow-man, and his trade as a politician and a lawyer is not going to deter him from expressing his views on some of the spiritual phases of life. "Nothing which is wrong for a religious teacher to do can be right for a politician to do." Thus much of the man. Now for the subject. When a man chooses for his text—"Love is the essence of religion," he is pretty sure that he is starting right; but it may be like the Scottish dame who often averred her conviction that marriages were made in heaven. When one of her daughters formed a *mesalliance*, one inquired somewhat sarcastically of the old lady, what she thought now of her belief. "Yes, matches are made in heaven," was her reply, "but then ye ken some o'

<sup>1</sup> LOVE, by Hon. J. W. Longley, D. C. L., Attorney General of Nova Scotia, cloth, pages 158. The Copp, Clark Company, Limited, Toronto, 1898.



them get a de'il o' a skitterin' comin' doon." One has the same feeling in reading Mr. Longley's book that the good Scottish dame had when she saw one of her cherished beliefs dashed to the earth. "Love is the ladder by which men can ascend from earth to heaven." \* \* Love lifts man "out of concern for self into an atmosphere of self-forgetfulness and regard for others," writes Mr. Longley. But it is not to be supposed that an honest man of the world, when he starts out to preach a sermon from an excellent text, will shade his eyes when he approaches the rocks and shoals where wrecks abound. He will perform his duty, rather, in laying bare the ugly places, although all may seem smooth. "One thing is clear—love-making does not imply love; fulsome words, gushing avowals, do not constitute unquestionable tokens of the presence of the mighty and unconquerable power of love in the human heart." \* \* "All that savors of fancy and romance is not love \* \* but an outgrowth of mutual vanity," and so he goes on, this man with the scalpel, laying bare the false and distinguishing as best he can from the true, what is merely ephemeral and a passing sensation, what is purely worldly and selfish, from what is holy, inspiring, unselfish, God-like.

A word more: one feels in reading the book that Mr. Longley has tried to tell the truth as it appears to him. That he has chosen a subject that has stirred the thoughts of the deepest minds as well as of the shallowest, a subject sometimes on which one would like to think much and read or speak but little, where at times but a thin line separates the sublime from the ridiculous, where a delicate allusion may be mistaken for an indelicate one, where the thoughts of churchmen and laymen, although they may be the same in substance, may be quite different in expression. These were some of the difficulties that faced Mr. Longley. That he has performed his task fairly well is but an honest verdict.

MASTER SUNSHINE<sup>1</sup>, Mrs. C. F. Fraser's little book, has a title that wins attention at once, and no reader, young or old, can put the book down after reading it without feeling more kindly to the world and its creatures. The naturalness of the story is one of its charms. The hero is not a goodie-goodie boy, one of the sentimental sort who dies early, but a vigorous healthy boy, with a lot of good intentions and a kindly nature. At the same time he has some bad habits and a lively temper to keep under restraint. Such a story, told with simplicity, has a great charm for many readers, especially for boys; and we congratulate Mrs. Fraser on the judgment and good sense she has displayed in the treatment of her characters.

Here is a book<sup>2</sup> that has been waiting for review many months. We do not like to return it at this late hour. We do not want to buy it for it is not worth the price asked for it. To keep it—ay, there's the rub—we'll have to review it. Why are some books printed? This is a book on elocution (!) It is full of beautiful extracts, which if a boy or girl, man or woman has soul and intellect to interpret, he or she cannot fail to give some pleasure to others in reading them. Not without. The

<sup>1</sup> MASTER SUNSHINE, by Mrs. C. F. Fraser, Halifax. Pages, 54; cloth; price, 50 cents. Publishers, T. Y. Crowell & Son, Boston and New York.

<sup>2</sup> EASY LESSONS IN VOCAL CULTURE AND VOCAL EXPRESSION, by S. S. Hamill, A. M., Chicago, author of Science of Elocution," "New Science of Elocution," etc. etc. Cloth; pages 198; price 60 cents. Eaton & Mains, Publishers, New York.

book is filled with unnatural and over minute directions, caricatures of figures that serve to express position. Why did not the author of this "Manual of Elocution" take a hint from Hamlet's advice to the players and not "imitate humanity so abominably!"

In the teaching of reading in our public schools too little attention is given to the acquisition of a distinct and cultured utterance. Carelessness in this respect produces that large class of readers who not only fail to bring out the power and beauty of a good book, but who contrive to inflict as much misery as pleasure upon their listeners. Mr. Burt's Manual<sup>1</sup> is a careful and painstaking attempt to prepare the way for a better state of things, and the book is recommended to all teachers of reading.

Some time ago the editor of the *New York School Journal*, asked a number of distinguished educators for their ideals and plans of education. These were published in the *Journal* under the head of "Pedagogical Creeds"<sup>2</sup> and attracted marked attention, especially such utterances as those of Wm. T. Harris, U. S. Commissioner of Education; Prof. John Dewey, of Chicago; Col. Francis W. Parker, Geo. P. Brown, Jas. L. Hughes and others. These articles are now published in book form and are well worth preserving and study, as they contain the best thoughts of some of the ripest minds engaged in education on the continent.

Beginners in Vergil will appreciate what Mr. Gleason has done for them in his *Gate to Vergil*<sup>3</sup>. In a neat little book, most attractive because it is illustrated and printed in the highest style of the art preservative, the chief difficulties that would meet the beginner are lessened, not by omitting troublesome portions or by simplifying the text, but by placing in juxtaposition to the text the same words re-arranged in the order of idiomatic Latin prose, by a series of simple foot-notes and illustrations, and by a special vocabulary.

A very pretty and dainty little book is that printed by the Woolfall Company, New York<sup>4</sup> which gives biographical sketches with thirty portraits and views of the ladies who have successively occupied the White House at Washington.

In the new elementary text-book on Physics published by the Macmillans<sup>5</sup> an attempt is made to induce the pupil to think for himself, and to treat each experiment as a problem which he himself has to solve, while the solution is rendered possible by suggestions given in the form of questions which he has to answer. Such an attempt renders it possible for the average pupil to do a large amount of original work for himself with a minimum of help from the teacher.

<sup>1</sup> ELEMENTARY PHONETICS, by A. W. Burt. Cloth; pages, 83. The Copp, Clark Co., Ltd., Toronto, Publishers.

<sup>2</sup> EDUCATIONAL CREEDS OF THE NINETEENTH CENTURY, edited by Ossian H. Lang. Publishers, E. L. Kellogg & Co., New York.

<sup>3</sup> THE GATE TO VERGIL, containing Book I, by Clarence W. Gleason, A. M. Cloth; pages 162; price 50 cents. Ginn & Co., publishers, Boston, Mass.

<sup>4</sup> A POCKET HISTORY OF THE LADIES OF THE WHITE HOUSE, by Olga Stanley. Cloth; 80 pages; price 25 cents.

<sup>5</sup> AN INTRODUCTION TO PRACTICAL PHYSICS, for use in schools, by D. Rintoul, M. A. Cloth; pages 166; price 2s. 6d. Publishers, Macmillan & Co., London.



The large number of excellent books on domestic science that the Macmillans are sending out, is a guarantee of the usefulness of such books and also of a demand for them among teachers. Those before us<sup>1</sup> are intended for teachers, are exceedingly practical and suggestive, and must prove useful to many who are looking for good low priced manuals as aids to teaching such subjects. Murché's *Lessons in Domestic Economy* proceed on precisely the same plan as his *Object Lessons in Elementary Science* which have been warmly recommended in these pages for their easy and natural stages, and for the ready way in which they call forth the powers of observation in children. This volume deals with the materials used in clothing and washing, and the composition of food. The lessons on Domestic Science, by Miss Lush, are practical, dealing with digestion of foods, methods of cookery, ventilation of dwellings and cleaning. The *School Cookery Book*, by Miss Harrison, deals with inexpensive materials for cooking in elementary and technical classes. The books are low-priced and altogether admirable for teachers.

The fascinating ease of style with which Macaulay beguiles his readers is apt to carry them away and make them forgetful of understanding the many allusions which his vast store of knowledge brings in to throw light upon his subject. To young readers and many mature ones, the two volumes before us<sup>2</sup> will prove of the greatest service. The services of the editor have not been confined to writing mere biographical sketches of the famous subjects of the essays—Addison and Pitt—but he has introduced to the careful reader the chief difficulties of the text and has given him the means in the notes, of overcoming them without having recourse to materials for informations that only a large library could supply.

Miss Woods has arranged in a neat little booklet a series of scenes from the *Merchant of Venice* for school plays, with directions for putting on the stage, dresses, etc. The scenes are selected with great care, and will prove of great advantage for the effective rendering of the great master of poetry.

The author of a new book on English History<sup>3</sup> must of necessity give some reason for adding to the long list of works on that great theme. Our author, who hails from the distant colony of New Zealand, does not make any claim to originality, but hopes that his little book may be found useful as an introduction to the study of our constitutional history. His data, giving the foundation events and all note-worthy features, are concise and well arranged, and the book would prove a valuable reference for a library.

<sup>1</sup> THE TEACHER'S MANUAL OF OBJECT LESSONS IN DOMESTIC ECONOMY, by Vincent T. Murché, Vol. II, cloth, pages, 334; price, 3s. LESSONS IN DOMESTIC SCIENCE, Part II., by Ethel R. Lush. Paper; pages 77; price, 6d. THE SCHOOL COOKERY BOOK, by Mary Harrison. Paper; pages 83; price 6d. London: Macmillan & Co., and New York.

<sup>2</sup> MACAULAY: *The Life and Writings of Addison; Essays on William Pitt*, by R. F. Winch, M. A. Pages 211 and 232; cloth; price, 2s. 6d. each.

SCENES FROM SHAKESPEARE, for use in schools, by Mary A. Woods. Paper; pages 77; price, 1s. London: Macmillan & Co. and New York.

<sup>3</sup> A FIRST SKETCH OF ENGLISH HISTORY, Part I (449-1307), by E. J. Mathew, M. A., LL. B., Professor of History in the University of New Zealand. Cloth; pages 164; price 2s. Publishers, Macmillan & Co., London and New York.

M. Jules Marcou, Professor of French in Harvard University, says: "The fatal idea so current among school children and college students, that French can be learned without any work is doubtless part of the prevalent notion that the manifest destiny of France is to provide more or less innocent amusement to mankind, and the pathetic endeavor of many teachers to make that amusement wholly innocent, has often been a source of grim satisfaction to the author. That to appreciate French literature, the language must be mastered, and that to master it, hard and continued effort is essential, is the lesson that needs to be driven home." The purpose of the exercises and readings, both in French and German, published by D. C. Heath & Co.,<sup>1</sup> keeps in view the needs of students and furnishes them at a low price with abundance of excellent material for drill.

In beginning a new series of readings from French authors,<sup>2</sup> the publishers in their preface state that they will introduce as school classics some of the best productions of such authors as Vogué and Emile Pouvillon, Daudet, Coppée, Theuriet and others, of which no English school editions exist. The series opens with Pouvillon's charming story of *Petites Ames*. The book contains an introduction, giving a sketch of the author, notes, with words and passages for *viva voce* drill and re-translation into French. The German series, analogous to the above, is begun in a way that indicates a marked advantage to the student. In the notes, comments are introduced on German life and thought whenever the text affords an opportunity for them. Information is supplied on word formation and derivation where such knowledge is likely to be of real help to the student in fixing the meaning of a word. In the text are given several German battle songs, beginning with the "Watch on Rhine," with the music. The German series, as in the French, will introduce the works of authors of note that have not heretofore found a place among English school editions.

The new text-book on inorganic chemistry<sup>3</sup> assumes that students who will use it to advantage have worked through a good elementary chemistry, such as that given in the author's course of elementary experiments for students. The student is not introduced in the first part of the present work to subjects with which he is unacquainted, but is enabled to do advanced work, founded upon his elementary course. The second part is an introduction to qualitative analysis, and the third part deals with volumetric work, and examples are given of oxidation, neutralization and precipitation methods. The work is

<sup>1</sup> HEATH'S MODERN LANGUAGE SERIES. *Dumas' La Question d'Argent*, with notes. Boards; price 30 cents. *French Review Exercises*, with vocabulary and notes. Paper; price 20 cents. *German Selections for Advanced Sight Translation*. Paper; price 15 cents. D. C. Heath & Co., Publisher, Boston, Mass.

<sup>2</sup> SIEPMAN'S FRENCH SERIES: *Petites Ames*, by Emile Pouvillon. Edited by Stephane Barlet. Pages 179; cloth; price 2s.

SIEPMAN'S GERMAN SERIES: *Vom Ersten bis zum Letzten Schuss*, von Hans Wachenhusen. Edited by T. H. Bayley, M. A. Pages 169; cloth; price 2s. 6d. Publishers, Macmillan & Co., London and New York.

<sup>3</sup> PRACTICAL INORGANIC CHEMISTRY for advanced students, by Chapman Jones, F. I. C., F. C. S. (London and Berlin). Cloth; pages 239; price 2s. 6d. Publishers, Macmillan & Co., London and New York.



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**DECEMBER MAGAZINES.**

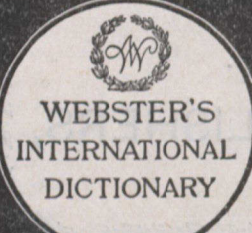
The special holiday number of the *Gripsack*, St. John, is replete with excellent illustrations, representing groups of the Davenport School, High School, Aberdeen and St. Malachi's Hall Schools, with portraits of his honor Justice King, Lt.-Governor McClelan, his worship Mayor Sears and others, making a number that is creditable to the enterprise of its editor, Mr. Knowles...The December number of the *New Brunswick Magazine* more than supports the favorable opinion that has been already formed of it. In variety of contents and the number of its contributors it surpasses all its predecessors. In the opening article Prof. Ganong proves from original documents and maps that Maine, not New Brunswick, was the loser by the Ashburton Treaty...In the December *Atlantic*, N. S. Shaler appeals in *The Landscape as a Means of Culture* to lovers of nature, who "seek communion with her visible forms," to train and educate themselves that they may learn to appreciate her beauties in such a way as to enlarge and dignify their own lives and minds. Short stories and the Contributors' Club round out the number and the year satisfactorily and brilliantly....The extreme importance of open-air playgrounds for rural

schools is pointed out by Isabella G. Oakley in *Appleton's Popular Science Monthly* for December. The tendency to spend all of the money on a building and a system, and to make no arrangements for adequate and attractive recreation grounds where the children can play "unregulated," and the depending largely on calisthenics for breaking the monotony of the school-room, are sharply criticised...The Christmas number of *St. Nicholas* is full of the holiday spirit. The frontispiece is a striking drawing by Maxfield Parrish, illustrating a tale by Evaleen Stein, entitled *The Page of the Count Reynard*. This is a story of the song contests of the troubadours, in the days of good King René, of Provence...The Christmas number of *The Century* appears in a striking cover, designed by Tissot, the famous French artist who illustrated the "Life of Christ." The design represents the visit of the Magi to the Christ-child, and was printed in colors in Paris. Uncle Riah's Christmas Eve is a humorous Southern story.

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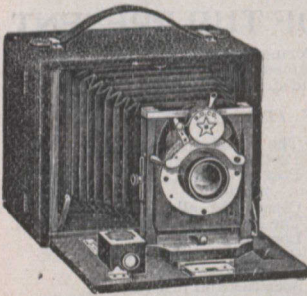
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With the consent of the School Trustees, first obtained, teachers may substitute as a teaching day any Saturday in December in place of Friday, December 23rd, so that the school may be closed for the term on Thursday, December 22nd.

J. R. INCH,  
Chief Superintendent  
of Education.

Fredericton, N. B.,  
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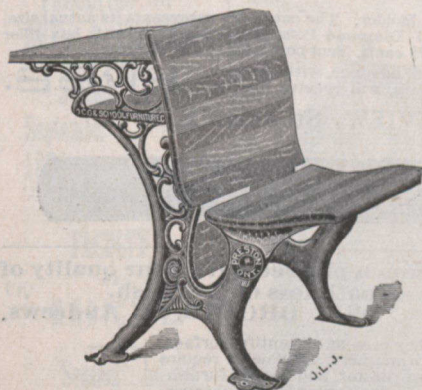
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