

THE EDUCATIONAL REVIEW.

FOR THE ATLANTIC PROVINCES OF CANADA.

VOL. XVI. No. 10.

ST. JOHN, N. B., MARCH, 1903.

WHOLE NUMBER. 190.

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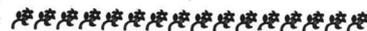
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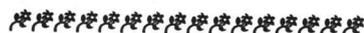


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THE EDUCATIONAL REVIEW.

Office, 32 Wellington Row, St. John, N. B. (Telephone No. 1209.)

PRINTED BY BARNES & Co., St. John, N. B.

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EDUCATIONAL REVIEW,
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THE ARTICLE on Cardboard work by Mr. Kidner is unavoidably held over until next month.

THE FOLLOWING numbers of the *REVIEW* are needed to complete files: Sept. 1887, Nov. 1889, Feb. 1890, March 1890.

DR. MACKAY, superintendent of education for Nova Scotia, has appointed a committee of nine prominent teachers of that province to select or compile a series of readers for the use of the schools.

THE DATE set for the opening of the Dominion Educational Association at Winnipeg is July 7th. No definite announcements have yet been made in regard to railway rates from eastern centres to Winnipeg.

REPRINTS of two interesting science papers have been received: "The Early Intervale Flora of Eastern Nova Scotia," by C. B. Robinson, B.A., of Pictou, and "Plant Physiology for the High School," by Prof. W. F. Ganong, Smith College, Northampton, Mass.

A NEW magazine has appeared at St. John edited by Dr. A. B. Walker, called "Neith," the name of an old Ethiopic divinity—who is represented in an elegant design on the title page. The contents embrace special articles by a number of contributors in addition to editorial discussion of various social and literary questions which are treated in a candid and thoughtful style.

IT IS now thought that the Agricultural College which it was proposed to build with funds contributed by the governments of Nova Scotia, New Brunswick and Prince Edward Island, will be built and controlled by the Nova Scotia government and be located at Truro. This seems the simplest as it is certainly the wisest arrangement. New Brunswick and Prince Edward Island can contribute their quota of students and have a share in its maintenance by providing fees and scholarships.

AN IMPORTANT conference in the interests of agricultural education was held at Halifax on Wednesday, March 4th. Prof. J. W. Robertson, of Ottawa, was present and delivered an address which was characterized, says the *Chronicle*, as one of the ablest ever delivered in the Parliament building. He took part in the proceedings of the conference, making many excellent suggestions.

THE thirty-second annual report of the board of managers of the School for the Blind, Halifax, has been received. The school has grown during the past ten years from forty-six to one hundred and twenty pupils. A new building is required to provide better accommodation and facilities for the increasing number of students who are availing themselves of the advantages which this admirable institution affords.

NATURE STUDY.

A HALF HOUR STROLL IN SPRING.

The warm sunshine of March had sent tiny streams of water trickling down hillsides. Now April by sun and shower was fast chasing the melting snow away to the rivers and the sea, and the brown earth was beginning to appear from under its winter covering. Miniature rivers, lakes, mountains, islands, etc., were everywhere. How Nature reveals her workings at the changing of the seasons! The features of a whole continent might be seen in a fifteen minute's walk up the street.

One day early in April the children of a primary room, guided by the teacher, set forth to explore. At the school gate they crossed the gutter on a plank. Conversation began at once; the plank was called a bridge; the water was a river, its direction was noticed, its source found to be a broad pool, which after it had been described, was called a lake, named, perhaps, School Lake, from its location. Into this lake farther up flowed another stream, described as inlet; with every little help, the idea of outlet was developed and name given. A little debating brought out the fact that water flows down hill, hence we say up stream, down stream.

Many other lakes and rivers were found, a smooth bottom showing slow current, a pebbly bottom rapid current. Even small Niagaras were there. How easy to get a description of a mountain, island, lake or river, when the object itself, fresh formed by Nature, was before the eyes. How pleased each explorer was to give a name to his own discoveries, after having described their characteristics and location. One very dark stream was called Black river. Too soon the half-hour was gone. This lesson would fail in its object if too much were attempted, and it would not be complete without the subsequent talks, sand work and drawings, which serve to impress the facts learned.

Who would try to teach Nature from a printed book when her own great picture book lies open before us all the year?

Sussex, N. B.

PIEBE W. ROBERTSON.

Instinct Not Education Teaches.

There is a school of the woods, just as much as there is a church of the woods, or a parliament of the woods, or a Society of United Charities of the woods, and no more; there is nothing in the dealings of the animals with their young that in the remotest way suggests human instruction and discipline. The young of all the young creatures do instinctively

what their parents do and did. They do not have to be taught; they are taught from the jump. The bird sings at the proper age, and builds its nest, and takes its appropriate food, without any hint at all from its parents. The young ducks take to the water when hatched by a hen as readily as when hatched by a duck, and dive and stalk insects, and wash themselves just as their mothers did. Young chickens and young turkeys understand the various calls and signals of their mother the first time they hear or see them. At her alarm note they squat, at her call to food they come, on the first day as on the tenth. The habits of cleanliness of the nestlings are established from the first hour of their lives. When a bird comes to build its first nest and to rear its first brood, it knows how to proceed, as well as it does years later, or as its parents did before it. The fox is afraid of a trap before he has had any experience with it, and the hare thumps upon the ground at the sight of anything strange and unusual whether its mates be within hearing or not. It is true that the crows and the jays might be called the spies and informers of the woods, and that other creatures seem to understand the meaning of their cries, but who shall presume to say that they have been instructed in this vocation? Mr. Long would have us believe that the crows teach their young to fly. He might as well say that the rooster teaches its young to crow, or that the cock-grouse teaches the young males to drum. No bird teaches its young to fly. They fly instinctively when their wings are strong enough.—*John Burroughs, in the March Atlantic.*

The Heavens in March.

The finest constellations now visible are in the western sky. At 9 p. m. on March 15, Orion, the most brilliant of all, is well down in the southwest. Taurus, with the Pleiades and Aldebaran, is to the right of Orion, and Canis Major with Sirius on the left. Canis Minor is above the latter, and Gemini is still higher, almost overhead. Auriga and Perseus are northwest of the zenith, in the Milky Way. The eastern sky has few groups comparable with these in brightness. Leo is well up in the southeast, two hours from the meridian, and Virgo follows him, her brightest star, Spica, having just risen. Hydra occupies most of the space to the south of these. But the most conspicuous objects in the eastern sky are the ruddy Arcturus, and, still brighter and still redder, the planet Mars. Ursa Major is above and to the right of the Pole, Draco lower down, and Cassiopeia below on the left.

Among the planets, Mercury is morning star throughout March, but is not well placed for observation. Venus on the 15th sets about 8 o'clock. She is gradually growing brighter, though as yet she is not nearly as conspicuous as she will be in May. Mars comes to opposition on the 29th, and is

visible all night long. He is in Virgo not far from Spica on line toward Regulus, and is moving slowly westward, in the direction of the latter star. Jupiter is morning star in Aquarius, rising at about 4.40 a.m., at the end of the month. Saturn is morning star in Capricornus, and rises about an hour and a half earlier than Jupiter.—*Condensed from Scientific American.*

BIRD STUDY.

READ BY MR. F. A. GOOD, AT THE CARLETON COUNTY, N. B., TEACHERS' INSTITUTE.

When Kipling wrote his "Jungle Tales" a dozen years ago, he could not have foreseen the avalanche of animal stories that was to be hurled upon the English speaking world. True, Kipling was not the first in the field. Natural history had been "popularized" by scores of writers long before his time. But the animal story as we have it now is purely modern, and its evolution is not difficult to trace.

Gilbert White, the Selborne naturalist, was one of the first to invest the story of lowly creatures with the charm of real literary talent. But he was of too serious a turn to add the spice of fiction. Then for a century after his time, works of this class were either imitations of White's immortal book, or else were attempts to serve up natural science in a cheap and palatable form.

During the last half century three American writers, Henry David Thoreau, John Burroughs and Maurice Thompson, following on somewhat similar lines, did much to render popular the story of the lower animals—especially of the birds.

Audubon's great work was an artistic and scientific achievement, rather than a literary labor.

Kipling then introduced, or reintroduced, the story form, giving the lower creatures the power of speech. This, the later writers have pretty generally taken away, but by careful study of their lives, have so interpreted each action that we have their biographies almost as accurate as if they did speak. It is no wonder then, considering the subject matter and the ability of the writers, that these tales have taken a great hold on the masses. There is, doubtless, much of faddism about this tendency, and it is not to be expected that the rage will last in its present violence, but that these will go the way of the historical and the problem novel. The good they are doing in the meantime, however, is almost incalculable.

And here let us notice the fact that three of the leading writers of animal stories are Canadians: Ernest Thompson Seton, W. A. Frazer and our own Charles G. D. Roberts.

In the works of these and other writers, the largest members of the animal world appear to be favored, but the greatest actual effect of these is seen to be a great increase in the study of bird life. This may be proved by the number of bird magazines that have sprung into existence in recent years. These maga-

zines have no counterparts dealing with other divisions of the animal kingdom.

And the reason why bird study has attained such prominence is not far to seek. There are few studies so delightful, few that can be carried on with so little detriment to your ordinary pursuits, whether they are other studies or business affairs. The study is not trivial, it is very important—important from an economic, scientific, literary, and humane standpoint.

First, from an economic standpoint. Birds are a great economic agency and, as such, they deserve our serious attention. The need of such knowledge among the masses is best seen when we understand the true value of bird labor. Bird life is so vitally connected with human life that we cannot afford to ignore it. There are thousands of natural products that would be more expensively raised, or found impossible to raise, were it not for our feathered friends. Indeed, scientists do not hesitate to say that our very existence would be threatened, if birds were exterminated. So greatly would weeds multiply that the struggle for existence on the part of many cultivated plants would be increased manifold. But man could combat the weeds. The greatest danger, however, would come from the rapid multiplication of insect life. Many a famine has been caused by a phenomenal increase of certain destructive insects. This man cannot well defend himself against. But the birds, working for nothing and boarding themselves, are willing to do this for him.

Now, strange to say, the hand of man has been for ages raised against certain classes of birds which have proved to be his best friends. This is notably so in the case of the hawks, owls and woodpeckers.

Now, don't rise and say that if they have been destroyed for ages, and if none or few of these dire consequences have followed therefrom, that there must be a flaw somewhere in the reasoning. It must be remembered that much of America, until recently, was an almost unbroken wilderness; that it formed the breeding ground for millions of birds, the overflow of which could easily keep up the supply in the more populous parts. Now the west is filling up fast, and the great negro population of the south habitually slay our common song birds for their own tables and even for the hotels. Our robins and bobolinks go that way by the million. Cruel fashion demands that millions more, and of the most beautiful too, shall be killed for the ladies' hats.

And again there is the heartless instinct to kill, which we inherit from our savage ancestors. The boy with his first gun and the grown up man simply anxious to show his skill, take away quite a percentage of the remainder.

It is true that their enemies among the carnivores are thinned out too. But while that may preserve a goodly number of the feathered folk, it also imposes extra duties upon them. Take for example the thinning out of the foxes. There was nothing

the fox liked more than a plump field mouse for dinner. Each fox undoubtedly accounted for several thousands of mice every year. An appreciable diminution in the number of foxes will allow a rapid increase in these destructive rodents. The farmers' crops and young fruit trees suffer as a consequence. This has been plainly noticed in our own county the past few years as a direct result of the popular and lucrative practice of snaring foxes. If the foxes go, what can do their work in keeping down the mice and like pests? It is absurd to think of traps or cats being employed to good advantage on the fields. But hawks and owls are willing to do this work if only a degree of protection is afforded them.

It is true there are a few species of these birds that prey occasionally upon song birds, game birds and barnyard fowls. But that is just another good reason for a knowledge of birds among the masses. There is not much better reason for shooting hawks indiscriminately, than for hanging men indiscriminately in the hope that eventually a murderer may be caught. A bird that does us a good turn, certainly deserves our good opinion, regardless of what a near relative has done.

We have not space to discuss the food value of birds to man. The study is important from a scientific standpoint—not less so than any other class of vertebrates. We need not go into this aspect of the subject very deeply, but it is interesting and profitable to note how birds have adapted themselves to circumstances; how they have followed man wherever he has gone, though of course other species preceded him, not a captive like the horse or dog, but free as in their own wilderness; they build their nest in barn and chimney, and forsake completely the building habits of their ancestors.

Mimicry or protective coloration is an interesting subject. How well the partridge is concealed among twigs and fallen leaves; how much the snowy owl looks like a mass of snow on a tree top; the snipe or sand-piper is well concealed on the sand and pebbles of the shore.

The study from a literary standpoint: All poets and all prose writers, of what is usually called pure literature, are full of references to nature. These, of course, may be about clouds, stars, trees or dogs for

"His are the mountains

And the forests His, and the resplendent rivers."

But they often bristle with references to bird life, from the "small fowles" of Chaucer to the Birds of Killingworth of Longfellow. We need not quote—we need only to think of the place the Skylark holds in English literature, Robin Red-breast, the Nightingale, the Cuckoo and the Eagle.

As to the value of this study from a humane standpoint, reference has already been made to the cruel tendency to kill without reason. Whether it is a "harmless necessary cat" or a saucy English sparrow on the fence, the boy's first impulse is to shy a stone at him. The intention is not usually to kill or even to cause pain, but he thinks it adds a zest to

his efforts in acquiring skill with a stone. As to the cat or squirrel, we will find it hard work to reform the boy, but he may readily be trained to respect the birds. It is surprising and gratifying how readily even the rougher boys will fall in with the idea of protecting the song birds, at least, but hawks, owls, herons and all birds of strange, ungainly, foreign or grotesque appearance, will seem for a long time to be a sort of challenge to them.

We may now proceed to what may be taught, and how it can be accomplished. All that *must* be taught is a half page in Bailey's Natural History. This is absurdly inadequate and there can be no doubt that if another text book were adopted a considerable more space would be given them. What you may teach in addition will, of course, depend somewhat on the number and rank of the grades you have. If you have many grades, you have them under your care for a longer period. You can then make them familiar with a few birds each year and then by the time they pass from under your control, they are on speaking terms with a good number of their feathered neighbors. From the fourth to the eighth grades inclusive, in town schools at least, would seem to be the best time to do the most effective work. In lower grades, lessons on kindness to all animals is about all that need be done.

You may use the half page in the text book as a starting point or you may start from any little incident out of the ordinary if it in any way calls attention to the birds. The body of a bird is often found killed against the telegraph wires or otherwise during the night migrations. An occasional one meets with foul play. (This is not a pun). These may be utilized as object lessons. A lesson or two will plainly show the need of suitable terms to apply to different parts of the bird's body. The teacher will then map out on the board or make a drawing on paper which will accurately show what parts names are needed for. (Exhibit.) A short drill will fix these names in the pupils' memories. Don't leave it too long unused or the names will have vanished.

A text book is a necessity, and when you get one, get Chapman's. It is expensive but exhaustive. Nothing is so exasperating as to search in a book and conclude that your book omits this particular kind. Blanchan's costs a dollar less, is beautifully illustrated, but is deficient in number described.

The flower traffic from the Scilly Isles is greater this season than ever before. Most of the trade is to supply the market for cut flowers in London, where, in addition to large consignments from France, twenty-two tons are said to have been received from the Scilly Isles in one day of last month.

The standing timber of Canada at the present time equals that of the entire continent of Europe, and is nearly double that of the United States.

STUDIES IN ENGLISH LITERATURE.

(An Incident at Ratisbon. N. B. Reader No. 3, p. 78.)

The proper title of this poem, as given in Browning's "Dramatic Romances," is "Incident of the French Camp." I take the following note from George Willis Cooke's "Browning Guide-Book:"

Mrs. Orr says the poem was founded on the following incident: "A boy soldier of the army of Napoleon has received his death wound in planting the imperial flag within the walls of Ratisbon. He contrives by a supreme effort to gallop out to the Emperor—who has watched the storming of the city from a mound a mile or two away—fling himself from the horse, and, holding himself erect by its mane, announces the victory. No sign of pain escapes him. But when Napoleon suddenly exclaims: 'You are wounded!' the soldier's pride in him is touched. 'I am killed, sire,' he replies; and, smiling, falls dead at the Emperor's feet. The story is true, but its actual hero was a man. A careful and extended search has not elicited any other information concerning this incident.'

Ratisbon is a city in Bavaria on the right bank of the Danube. After the battle of Eggmuhl, in Napoleon's campaign of 1809, the Austrians retired upon Ratisbon, and the pursuing French defeated them again beneath its walls, and burned a great part of the city.

Jean Lannes (1769-1809) was one of Napoleon's most successful generals. He was the son of a livery stable keeper, and rose to be a marshal of France, and to bear the title of Duc de Montebello. He was mortally wounded in the battle of Aspern and died at Vienna. Napoleon said of him that "he had found him a pigmy and made him a giant."

"Flag-bird" in verse 5, is the eagle of France on the standard which the boy had planted in the market-place. Compare Tennyson's "Ode on the Death of the Duke of Wellington."

"Again their ravening eagle rose

In anger; wheeled on Europe-shadowing wings."
and for the use of "vans" in the sense of "wings," see

"He wheeled in air, and stretched his vans in vain;
His vans no longer could his flight sustain."
—Dryden.

There is an interesting comment on this poem in Owen Wister's novel "The Virginian." Molly Wood, the school teacher, is reading Browning to her lover, the cow-puncher.

"Of the next piece that she read him he thought still better. 'And it is short,' said he. 'But the last part drops.'

"Molly exacted particulars.

"The soldier should not have told the general he was killed,' stated the cow-puncher.

"What should he have told him, I'd like to know?" said Molly.

"Why, just nothing. If the soldier could ride out of the battle all shot up, and tell his general about their taking the town,—that was being gritty, yu' see. But that truck at the finish—will yu' please say it again?"

"So Molly read—

"'You're wounded!' 'Nay,' the soldier's pride,

Touched to the quick, he said,

'I'm killed, sire!' And his chief beside,

Smiling, the boy fell dead.

"'Nay, I'm killed, sire,' drawled the Virginian, amiably; for (symptom of convalescence) his freakish irony was revived in him. 'Now a man who was man enough to act like he did, yu' see, would fall dead without mentioning it.'"

Here is some material for discussion in class.

ANSWERS TO QUESTIONS.

1. The song called "The Ivy Green," is found in "Pickwick Papers." The clergyman of Dingley Dell recited it at the card party at Manor Farm.

2. "The Little Post Boy," is taken from a book called "Boys of Other Countries," by Bayard Taylor, the well-known American traveller and writer. It is a most useful book for supplementary reading in geography.

3. "Making Maple Sugar," by C. D. Warner, is from a very entertaining book called "Being a Boy," published 1877. Other interesting books by this writer are "In the Wilderness," "My Winter on the Nile," and "Baddeck and that Sort of Thing," published in 1874, before Cape Breton was as well known to tourists from the United States as it is now.

4. Of the quotations on page 183, No. 1:

"I live for those who love me,
For those who know me true,
For the heaven that smiles above me,
And awaits my spirit, too;
For the cause that needs assistance,
For the wrong that needs resistance,
For the future in the distance,
For the good that I can do,"

is from a poem called "What I Live For," believed to have appeared first in a Liverpool newspaper. The author, George Linnaeus Banks, was a journalist and miscellaneous writer, born in Birmingham, 1821. He died in London, 1881. He wrote the once popular song, "Dandy Jim from Caroline."

I have been unable to find the writer of the second selection.

Quotation number three,—

"In the lexicon of youth, which Fate reserves
For a bright manhood, there is no such word
As—fail,"

is found in the play of "Richelieu," by Lord Lytton, better known as "Bulwer." (1805-1873).

The fourth quotation is by Ralph Waldo Emerson, and forms part of the third stanza of his "Voluntaries," contributed to the *Atlantic Monthly* in 1863. The whole verse is worth quoting:

"In an age of fops and toys,
Wanting wisdom, void of right,
Who shall nerve heroic boys
To hazard all in Freedom's fight,—
Break sharply off their jolly games,
Forsake their comrades gay,
And quit proud homes and youthful dames,
For famine, toil and fray?
Yet on the nimble air benign
Speed nimbler messages,
That waft the breath of grace divine
To hearts in sloth and ease.
So nigh is grandeur to our dust,
So near is God to man,
When duty whispers low, *Thou must,*
The youth replies, *I can.*"

ELEANOR ROBINSON.

Footprints in the Snow.

Worn is the winter rug of white,
And in the snow-bare spots once more
Glimpses of faint green grass in sight,—
Spring's footprints on the floor.

Upon the sombre forest gates
A crimson flush the mornings catch,
The token of the Spring who waits
With finger on the latch.

Blow bugles of the south, and win
The warders from their dreams too long,
And bid them let the new guest in
With her glad hosts of song.

She shall make bright the dismal ways
With broideries of bud and bloom,
With music fill the nights and days
And end the garden's gloom.

Her face is lovely with the sun;
Her voice—ah, listen to it now!
The silence of the year is done:
The bird is on the bough!

Spring here,—by what magician's touch?
'Twas winter scarce an hour ago.
And yet I should have guessed as much,—
Those footprints in the snow!

—Frank Dempster Sherman.

GERMAN SCHOOLS AS SEEN BY A NEW BRUNSWICK TEACHER.

There are in the city of Berlin proper 249 common or free schools, with an enrolment during the school year, 1901-1902, of 211,347 pupils. Every child must, unless pronounced by a medical doctor as unfit, attend one of these or another school as good, from his 6th to his 14th year. This period has *not* been recently lengthened, as I stated in a letter to the editor of the REVIEW, but the number of *classes* has been increased from seven to eight. Previous to this term two years were spent in grade seven, or the highest grade. Now the grades correspond to the years.

In these schools there is no Latin or any other language except German studied. To obtain a license to teach in these schools, at least three years must be spent in a normal school, and then the necessary examinations passed. In these normal schools there is usually a six years' course given, the first three being only necessary, when the applicant has not obtained elsewhere the required scholarship. Only a very small per cent. of the teachers employed in Berlin are trained in the city normal schools. The great majority comes in from the smaller towns throughout the State of Prussia. The salary of a teacher in these schools is for the first four years very small—only a little over \$300 a year for men, and less for women. In the 5th year men receive an increase of \$75, in the 8th year, an increase of \$125, in the 12th year of \$200, in the 15th year of \$250, and so on until in the 32nd year the salary is \$1,060. A head master receives to begin with about \$800, and at the end of his 32nd year of service, \$1,400. A lady teacher receives at first \$250, and at the end of her 25th year of service from \$400 to \$600. In many parts of Prussia, however, a lady teacher receives a much smaller salary. At the present time (Jan. 3, 1903) the lady teachers of Prussia are in conference here in Berlin. They report that in 37 districts in East Prussia the yearly salary is less than \$200, and that in West Prussia, where the living expenses are high, it is seldom higher than \$200. They state that in East Prussia a lady teacher receives only \$240, after 31 years of service. The conference is full of life, and so far the ladies have talked of nothing besides the smallness of their salaries. They are calling on the government to amend the law, as follows: (1) A lady shall receive the same ground salary as a man. (2) The periodical increase shall not be less than 80% of that given to a man. (3) A lady teacher shall receive,

in addition to pay and house rent, an amount not less than 75% of that given to an unmarried man for the same purpose.

In 1901-2, 112 head masters received the maximum salary, and only two the minimum. This can be explained by the fact that the teaching profession is not used as a stepping stone. In and for itself it is considered a desirable occupation. Among the ordinary teachers, 299 received the highest salary, and 100 the lowest, while among the ladies 202 received the maximum and 109 the minimum. These salaries seem small, but it is to be kept in mind that a teacher here knows just where he is. He is given his appointment for life; his salary is the same as that of all other men of his age in similar schools; he receives a substantial advance every few years; and if after ten years in the service he should become physically unable to teach, he will receive a pension equal to $\frac{1}{4}$ of his yearly salary at that time. No pension is given before ten years of service, and after that it increases 1-60th of the salary each year, until after 40 years of service, when it amounts to $\frac{3}{4}$ of the salary then received. At this point it remains.

Of the Prussian high schools there are several kinds. The *Gymnasium*, or classical school, is the best known. Of these there are in Berlin proper 15, with an enrolment during the last year of 7,220. The main purpose of these schools seems to be to fit young men for the university, and Latin and Greek are given more attention than other subjects. A pupil is supposed to have had three years' training in an elementary school before he enters the *Gymnasium*. This he may secure in the common school, but this is not generally the case. There is often in connection with the *Gymnasium* itself a preparatory school, giving this three years' course. Although these preparatory schools are taught in every instance by common school teachers, and there is a yearly tuition fee of some \$30 per student, a father who intends to send his son later to a *Gymnasium*, sends him to one of these preparatory institutions if he can possibly find the money. This he does, simply because there is a feeling that a common school is really *common*. Every *gymnasium* teacher has studied at least three years in a university, and while there heard lectures on the science of teaching. He has not, however, had the drill and practice in a normal school that the common school teacher has received; and although he is certainly better educated, and a man of wider view, with a much better position in society than the common school teacher, I very much doubt if, as a general thing, he is really a more skilful teacher.

In the *Gymnasium* a year's course is given, and as intimated, Latin and Greek are the leading subjects, the former being given for the first five years, 8 hours a week, and in the last three years, 7 hours a week. Greek begins in the fourth year and receives 6 hours a week during that and the five following years. No other subjects approach anywhere near these in amount of time devoted to them. Mathematics comes next with half the time given to Latin, and then German with a little more than one-third.

GEORGE J. TRUEMAN.

(To be continued.)

A Pushing Boy.

I ran across a young fellow the other day who three years ago first started to work in the city. His job was that of office boy. He then stood about 4 feet, and was perhaps 16 years old. Today he is official stenographer in the law firm where he started as office boy.

He tells me that after a month in the office he got kind of tired sitting around doing nothing between errands, and in order to pass the time dabbled in short-hand. It came easily to him, and before long he challenged the office stenographer to a test of speed and accuracy. He did not come within 50 per cent. of winning, but at that surprised himself, and buckled right down to the study.

In three months' time he eclipsed the other in the test. A month later the official stenographer got a better offer, resigned, and the office boy got the job. Now that he has mastered stenography, he has taken up the study of the law. It does not require a large stretch of imagination to see his name one of these days as a member of the firm. As an office boy, how do you put in your spare moments?—*Boston Traveller*.

Are We Teaching Too Much.

Our public schools are trying to do too many things.

To much of everything is taught the pupils, and as a result they learn too little of anything that is useful. It is not possible for a child to divide his attention among eight or ten subjects every day without being injured.

Children must necessarily be taught to read, write and cipher if their powers are to be developed. When these things are done, and well done, they are better prepared for life than a large proportion of the children who will be graduated from our grammar schools next June.

We shall make a departure worthy of the age when we act on the decision that some subjects should not be included in the common school study course. Too many studies, too long vacations, too great elaboration of details and too much teaching, or what is called teaching, are some of the evils from which the schools are suffering.—*Principal E. B. Sherburne, Roxbury, Mass.*

A RECENT EXAMINATION IN PHYSICS.

BY JOHN WADDELL, D.SC.

The examination of last July in Physics for Grade XI., Nova Scotian schools, would be a difficult one were it not for the options given. If the candidate were required to make a good mark on the whole paper a wide knowledge would be necessary, and some considerable maturity of thought. The difficulty of the paper, however, is greatly relieved in that there are eleven questions out of which *five* only are to be answered. The questions cover almost the whole range of the subject of physics, including mechanics, heat, light, sound, and electricity, so that anyone having a good knowledge of two or three of these departments could make an excellent showing.

A number of the questions are of the regular text-book work, as for instance, "For what purpose is the electrical condenser used? Describe the Leyden Jar and show how it fulfils the functions of a condenser."

Questions like these are for the benefit of the diligent plodders, for those who are apt to be disconcerted by problems of an unfamiliar character, though they might be able to solve them if given longer time. It is to be feared that these questions, however, may have the unsatisfactory result of fitting in too readily with the desires of the clever superficial examinee, who by skimming through the text-book may acquire a temporary knowledge of a number of facts. Where it is possible the examiner would try to distinguish between the two kinds of candidate, and if the examinee has time to attack a question, by which he can show that his knowledge of the subject is not merely superficial, it is well for him to do so.

There are several questions upon the paper that test the examinee's power of grasping principles and applying them with common sense. Two questions were noticeably of this character, and they attracted, perhaps I might say *allured*, many candidates, but few of whom succeeded in grasping the essential features of the problems. Since both questions involved the application of common sense the candidate that answered one correctly almost invariably succeeded with the other.

One of the questions, the first on the paper, was: "An experimenter wishing to find out whether or not air has weight, weighs a rubber bag first empty, and then full of air, and he finds that he can detect no difference in the two weighings. Is he justified in concluding that the air has no weight? If so, why? If not, point out in what particular or particulars the experiment is faulty." Nearly all attempting this problem started out with the idea that the air *has* weight, and that therefore the experimenter is *not* justified in concluding it to be imponderable. But in this they were merely stating a *fact* that they had learned from book or teacher,

and had little idea of the considerations from which the conclusion has been drawn. Moreover, they did not seem to have any conception of how considerable the weight of the air is. The source of the error was supposed by most of the examinees to be the lack of sensitiveness of the balance. It would be a very poor balance indeed that would not be able to detect the weight of air contained in a soft rubber ball, costing five or ten cents, and almost any balance that an experimenter would think of using would be able to detect one-hundredth of the weight. And yet the most frequent supposition was that the balance was not sensitive enough. If that were the correct answer the question would be the worst kind of catch question. In a hypothetical case, such as that given by the problem, it is to be assumed that the instruments are correct, or some hint should be given that they are not so. The point of importance in the problem is that what is weighed is a *rubber* bag, and therefore collapsible. Why does this make any difference? Simply because when the bag is collapsed it does not displace so much air as when expanded and is therefore not so much buoyed up. When full of air the bag just displaces exactly an equivalent amount of outside air in addition to what it displaced before, and is buoyed up to a corresponding extent so that it does not press any more heavily on the scale pan of the balance. If a glass globe were employed instead of the rubber bag it would displace just as much air whether empty or full of air, and would be buoyed up equally in both cases, and so the weight of the air could be detected.

The other question to which reference has been made was, "If water continued to contract continuously on being cooled, and consequently had its maximum density at some temperature below the freezing point instead of at 4°C ., discuss the effect this would have upon the formation of ice in ponds, etc." This is an easier question than the other, but the answers were usually wide of the mark. If the maximum density point is below freezing, that is if ice were heavier than water, what should happen? Evidently that ice would form on the bottom of the pond or if it formed on the top it would sink. Suppose the pond to be several degrees above freezing and the weather to become colder. The surface of the pond, being most exposed, would fall in temperature and so the surface water would become heavier and would sink. This is actually the case in nature so long as the temperature is higher than 4°C . As the cold water sinks, other water would be brought to the top, in turn becoming colder and sinking. In this way the pond would cool down pretty uniformly throughout. With 4°C . as the maximum density point of water, this process goes on only till the whole pond is cooled down to that temperature, after which the colder water remains on the surface till it is frozen, and as ice is even lighter than water it remains on the top, while the water beneath is still above the freezing point. But in the case assumed in the question, the whole pond would reach the freezing point before any portion

of it would freeze, and the ice when formed would lodge on the bottom.

One would think that this line of argument would naturally occur to the mind, yet a not uncommon answer was that the ice when forming would draw away from the edge of the pond and float in the middle, though why ice should float if it were denser than water is not very evident. Probably the examinee could not dismiss from his mind the fact that ice floats, though the supposition in the question involves the contrary.

These questions have been discussed in order to encourage future examinees to look a little carefully at questions before attempting to answer them. No doubt an hour is a short time for an examination, but two or three minutes thought would often save twice as much misused time.

Cumberland and Colchester Counties Teachers' Institute.

In the second day's proceedings of the Teachers' Institute at Amherst, Miss Helen N. Bell of Halifax gave a very instructive address on Domestic Science. She made a strong plea for women as teachers of the children in their earliest years.

Mr. J. A. DeLancy read an excellent paper on History, which gave rise to a spirited discussion, as did the paper on "Good Manners," by Miss MacAleese, which was published in last month's REVIEW. Some points brought out by Principal Solon and others were: Be cheerful, be sincere with pupils; it is not necessary to wear a continual smile; boys and girls don't like to be simpered at; good manners are not a matter of smiles, grimaces, bows, but of conduct.

At the closing session Mr. L. C. Harlow of the Normal School staff gave a very interesting and instructive talk on Nature-work, making the following points:

(1) *What* is it? The study of the earth and the living things upon it.

(2) *Why* should it be prominent in our school work? (a) It will keep alive and train the natural tendency of children to observe. (b) It gives a field for the enquiring spirit, inspiring the children with confidence as they find out, first hand, the workings of nature. (c) The industries of our country (mining and agriculture especially) demand persons who can see and study the problems of nature; a bent, or the scientific attitude of mind, should be given the child in the public school.

(3) Hints on the *how* of Nature study:—
(a) The teacher must be enthusiastic and join the pupil in the child way of inquiring into what he sees in the air or the woods. It is not book study.
(b) It should consist mainly of talks and questioning upon things seen every day, with simple experiments to illustrate any point not clear. (c) Allow the pupil to work—the aim is to have the pupil do something—to see, think, to devise a means to an end. (d) Make the lesson lively and never more

than 15 minutes long. (e) Make it a basis for a written exercise or a drawing, since these encourage close observation. (f) Suit lessons to the season of the year. (g) Aim not at facts; "Facts may come and facts may go, but never let the spirit go."

Mr. T. B. Kidner, Director of manual training, spoke on the subject of Drawing, showing some of its benefits, viz., it develops power of the eye to see, the hand to do. Drawing is an educational factor, regarded as a language. He offered some valuable suggestions in the matter of drawing in the public schools.

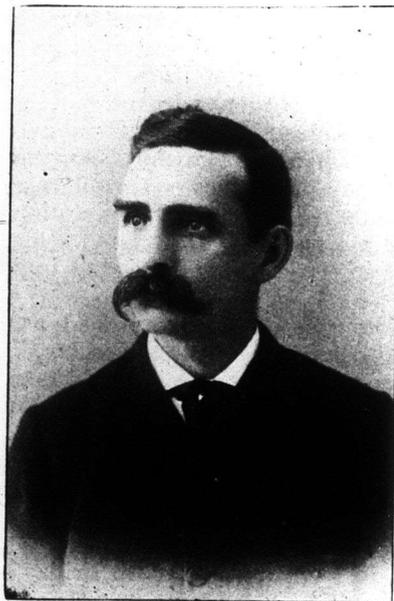
Dr. McDougall, of Amherst, read a paper on "Physical Preparation of the Teacher," showing many reasons why the teacher should take exercise and attend to his health; because he inspires his pupils by his own condition. He advocated medical inspection of schools and pleaded the great necessity of the child's proper physical condition in school. It was a very excellent paper. The institute closed with the usual votes of thanks.

The "At Home" from 5 to 6 on Friday afternoon at Mayor Curry's was a very pleasant and enjoyable function. Mrs. Curry, assisted by other ladies, received the visitors to the number of about 125. Delightful music, instrumental and vocal, was provided and refreshments were served. Mrs. Curry's hospitality was highly appreciated.

Education a Thousand Years Hence.

In a book just published, entitled "A Wedding Tour in 3000," the author writes of the schools that are to be, in the following vein:

Education, while compulsory, allows parents to bring up their children according to individual talents and preferences. The government furnishes teachers free of charge; also every kind of educational material. It is provided by law that no teacher shall have more than ten children at the utmost under his care. The schoolhouses, models of hygienic architecture and decorated with pictures and statues so as to develop the little one's love for beauty and art, stand in the centre of vast squares, laid out as botanical gardens to facilitate the study of nature. The school hours begin and end with music and song. No child is obliged to study dead languages or anything else useless. All the books ever written and all the helpful thoughts ever coined are at hand in the universal language, which, by the way, has no complicated grammar or orthography. It is simplicity itself, and there is not one superfluous letter in it; neither is there a blasphemous or unclean expression. We read in the books of bygone ages of words that were prohibited and discouraged by the clean-minded. There would be no use for such laws or social anathemas now, as swearing is rendered impossible by the absence of such words. The children have two free days a week and on the four remaining work days visit school for three hours, which time is amply sufficient for our purposes.



THE LATE DR. ELDON MULLIN.

The people of New Brunswick received a painful shock in the news of the death in South Africa of Dr. Eldon Mullin, late principal of the N. B. Normal School. On the 13th of February, 1902, Dr. Mullin left this province to assume the principalship of the Normal School at Pretoria, and to assist in perfecting an educational system for the newly acquired British colonies in South Africa. Just one year from that date the sad tidings of his death came, the result of an attack of enteric fever. About the beginning of this year Dr. Mullin had removed to Johannesburg to take the position of deputy director of education for the Transvaal and Orange River colonies, at a salary of \$5,500. At the time of his death he was engaged in compiling a manual for the schools of the two colonies.

The greatest sympathy is felt for the family of Dr. Mullin, who went last autumn to South Africa to join him. This sympathy, and regret at the sudden close of a bright educational career, found expression in the address of Principal Crocket to the students of the Normal School, Fredericton, on the morning after the news was received, and the resolutions passed at a meeting of the St. John teachers, with the memorial service conducted in St. John's Church, St. John, by the Rev. J. deSoyres, on the 18th of February, in all of which the esteem and sorrow for the deceased were feelingly expressed.

Dr. Mullin was a native of Fredericton and had reached the age of 52 years. He received the greater

part of his education in the Grammar School at Gagetown, of which his father was the principal, and in the University of New Brunswick, from which he was graduated in 1881, receiving his degree of B.A. Three years after he took the degree of M.A. in course, and at the Encœnia of last year his alma mater conferred on him the honorary degree of Ph.D. He taught school in several parts of the province, and his zeal and energy as a teacher won for him rapid promotion. In 1879 he was appointed Inspector of Schools for York County, which position he resigned four years after to become head of the Provincial Normal School, where he remained for nineteen years.

Dr. Mullin always took an active part in public affairs as well as in educational work. He was of a cheerful and energetic disposition, ever disposed to look on the bright side of life and encourage others to do so. He has left many warm friends and admirers, especially among those students who have gone from the Normal School in recent years, who will cherish the memory of his unfailing interest in their behalf and mourn his sudden and untimely death.

DEATH OF PRINCIPAL CAMERON,

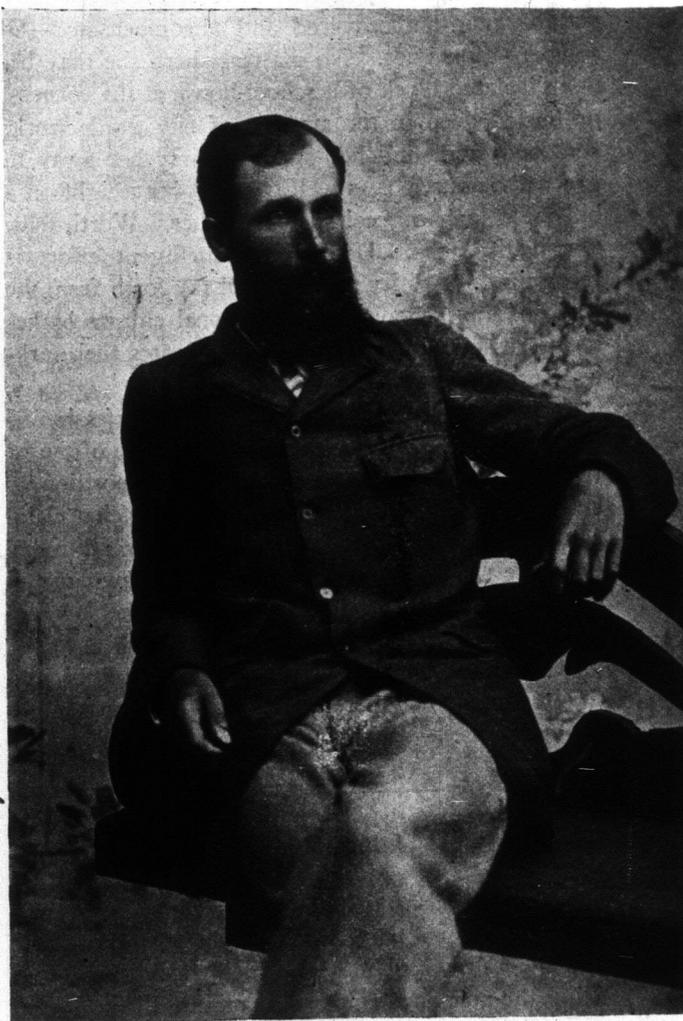
In the death of Principal Cameron, at fifty years of age, Nova Scotia has lost one of her foremost teachers and one of her brightest writers and keenest intellects. For nearly twenty-eight years he had been principal of Yarmouth Academy. To it he gave his best energies. Death came to him in the midst of his work, suddenly, and let us hope painlessly.

On Saturday, Feb. 21st, Mr. Cameron had been engaged with his associate teachers arranging the school library and remained in his own room reading and writing, after the others had gone. He must have been suddenly stricken with death while preparing to go home, for the janitor on coming into the library room early in the evening found his lifeless body stretched upon the floor. For more than a year past Mr. Cameron had not been in his usual good health, but recently had improved, and on the day above named appeared to be in excellent health and spirits, taking a deep interest in the work of cataloguing and re-arranging the library, which had lately been enriched by additions from his own collection of books and from other sources.

Mr. Cameron's strength as a teacher lay in his inspiring personality and his antagonism to everything that partook of the nature of superficiality. Himself possessing a keen and vigorous intellect and delighting to use it, his constant endeavor was to arouse in others the desire to think and be self-reliant. It was the desire of Aeneas Cameron that his own work should be his eulogy. Many of his students are to be found in all walks of life in Nova Scotia and in adopted homes elsewhere, and all speak of him with that affection and respect which the true teacher ever inspires.

Principal Cameron was a terse and strong writer and his contributions to the REVIEW almost from its beginning until within the past year are models of directness. In English literature and astronomy, his writings, like his teachings in the class-room, were original and suggestive, always appealing to the reason, and happy in that sprightly humor that was so characteristic of the man. In literature and astronomy he was an acknowledged authority, and in the latter subject his work, especially in mathematical astronomy, secured him recognition from abroad. His work at the Summer School of Science, in teachers' institutes and in the city where he lived, in both these subjects, will long be remembered for its inspiring and effective character.

Mr. Cameron's devoted attachment to wife and home was a characteristic of his refined and sensitive nature which his nearest friends will delight to hold in remembrance. The deepest sympathy will be felt for the wife in her great sorrow.



Larger Salaries.

"The laborer is worthy of his hire" is a truth that needs no proof, and that every laborer is not worthy of his hire is equally clear. Yet there is scarcely a teacher on a small or moderate salary but feels a sense of injury that she is not receiving equally as much as any other teacher in the field, no matter how superior that other may be, either as teacher or woman, for a superior womanhood is the foundation of the highest type of a teacher. It may sound harsh and unsympathetic to say of the host of mediocre teachers who carry about this chronic sense of injustice that they will deserve something better only when they are worthy of it.

This does not decry the justice of larger salaries for all teachers. It is but the consideration of the

relative salaries of the commonplace and superior teachers. Every community needs a change of heart and a quickening of the conscience in the matter of compensation to their teachers. Yet no worthy teacher—and that word worthy is tremendously inclusive—can ever receive full reward for the service she renders; it is not payable in coin.

The demand for larger salaries so constantly made on the plea of experience alone has but little ground to rest upon. It is true that experience is un purchasable and invaluable; but the number of years spent in the school-room, uncharacterized by steady growth and increase of power, is no claim to greater emolument. Every year may serve to imbed a teacher deeper in the groove of mechanical routine and to deaden her into greater indifference.

No teacher who is striving, climbing, growing,

with higher ideals today than she had yesterday can remain long undiscovered and uncompensated—as compensation goes. No matter where she may be, in an isolated block of a school-house at the corners, or buried deep in the stratum of city grade work, somebody will find her out and carry her away to greener pastures. As well try to cover a light on a hill as to long conceal such a teacher. Worth tells. Originality tells. Determined intelligent effort is recognized. A lofty purpose will ray forth from the walls of any school-room. Personal culture bathes its possessor with a glow that penetrates the murkiest surroundings.

In view of these things, is it not a confession of inadequacy to complain that an experience of ten or twenty years has not brought a higher position or larger salary? Better question silently, What claim can I justly make that I am of greater worth today than five years, or ten years ago? If no human soul can stand still in attainment, have I gone forward or backward?

It requires courage to throw a search-light into the inner self, but there are revelations that come in no other way.—*Primary Education.*

Long Measure.

Direct the class to note the division of the rule into twelve equal parts, and give the term inch. Drill pupils in drawing lines one inch, two inches, etc., using the rule as a guide; also require them to measure different objects with the rule, stating their lengths in inches.

The aim of the next step is to train the pupil's judgment respecting the length of various objects. Call attention first to objects at the desks not previously measured. Question on these. How many inches long is your pencil? Your book? Your slate? After answers have been given, pupils should verify or correct statements by testing in each case with the foot-rule. As a further training, hold objects before the class and familiarize pupils with judging at a distance. Note lengths of pieces of ribbon, strings, heights of bottles, vases, etc. Correlate with the drawing. Direct the class to draw lines of certain lengths, squares, and oblongs of certain dimensions, etc., and then test their drawings with the rule.

After thorough drill on the inch, proceed to teach the foot. Lead pupils to see the necessity of a unit of measurement greater than the inch. Ask how many inches long are the blackboards, the doors, the walls? They cannot answer correctly. Why?

Greater lengths require a greater unit of measurement.

Tell pupils that a rule of twelve inches is called a foot-rule. Lead them to see that an object twelve inches in length is also a foot in length. Proceed with the foot as with the inch. Require pupils to draw lines on the blackboards and measure objects with the rule. Judge first of near objects. How many feet long is your desk? How many feet wide? How wide is the aisle? Next consider objects at a greater distance. How many feet long are the blackboards, windows, doors? Give further drill in drawing lines on the board of one foot, two feet, etc., and test with the rule. Note when the foot is used as a unit of measurement.

After sufficient drill, produce the yard-stick, and have it measured with the foot-rule. After the class has discovered that it is exactly three feet in length, give the term yard. When do we use the yard measure? In measuring ribbons, cloth, silk, etc. Contrast with the use of the foot measure. Drill on the yard by drawing lines on the blackboard, by measuring off lengths on the floor, blackboards, doors, walls; by measuring lengths of ribbons, strings, etc.; and by judging and testing lengths of various objects.

The length of a rod, also, can be taught by measurements in the school-room. Mark off five and one-half yards along the length or width of the room and give the term rod. Train the judgment by noting the length of the hall, the schoolyard, the width of the street, etc. Note when this measure is used.

The next step is the mile. How shall we teach this? Ask pupils how far they live from the school? How far from the school are certain trees or buildings? They can not tell in rods, yards, feet or inches. City children will probably give a number of squares or blocks in answer. Tell them that in the country where houses are far apart, people do not speak of squares or blocks. In this way lead them to see the necessity for a term indicating long distances. Give the term mile and state that it is equal to three hundred and twenty rods. To develop the idea underlying the term, tell pupils about how many squares make a mile; note the distances between their homes and the school; note the distance between prominent buildings, etc.

A series of lessons as above suggested arouses much interest among the pupils, as it affords all an opportunity of taking an active part in the drawing, measuring and testing. Pupils will also see clearly that long measure is used for measuring lengths, distances, etc., and will become thoroughly familiar with the table.

E. C. S.

The Class-Room.

1. Draw a square inch.
2. Draw a rectangle 16 inches long and one inch wide.
3. Divide it into square inches.
4. Draw a square 16 inches.
5. How many rectangles like that just drawn are equal to a square 16 inches?
6. Draw a square which shall contain 16 square inches.
7. Draw a square which shall contain nine square feet.
8. 9 square feet equals what?
9. Draw a square which shall contain 4 square inches.
10. What is the square of 2? of 3? of 4?

The square of a number is indicated by a small figure to the right and a little above the given number; thus 2^2 means "the square of 2."

Go slowly, and do all work accurately. Some pupils will need help. While not refusing to aid them, teach them to help themselves. Let them see every process. Require them to perform every process.

Mark the silent letters in comb, crumb, czar, scene, gnash, sign, reign, feign, rhyme, knave, knot, calk, chalk, folk, balm, halve.

Make sentences in which the following words are used correctly: All, awl; aisle, isle. I'll; add, adze; ate, eight; Abel, able; air, Ayr, ere, e'er, heir; ark, arc; aloud, allowed; altar, alter; ant, aunt; axe, acts; ail, ale; assent, ascent; accept, except; addition, edition; attendance, attendants; assistance, assistants.

Here are twenty-five words in common use. Can your pupils pronounce them all correctly? Are they in the habit of doing so? If not, let a search in the dictionary be followed by a drill sufficient to insure correct pronunciation in the future: Strength, shrivel, simile, programme, contrary, leisure, lever, equable, equerry, Giaour, Palestine, Italian, Niagara, microscopy, telegraphy, finance, canine, squalor, isolated, coadjutor, hyperbole, monogamy, isothermal, perfect (verb), minute (adj.).

Compose sentences showing the use of: into, in; those, these; this, that; much, many; between, among; who, which; who, that; oldest, eldest; teaching, learning; less, fewer; teaches, learns; fall, fell; lie, lay; sit, set.

In London recently one of the weekly papers offered a prize for the best list of strong words, to

number ten. The announcement specified that but ten words would be considered from any one person and a committee of literary men would select from the numbers offered the ten strongest words in the English language. These are the words that won: Hate, blood, hungry, dawn, coming, gone, love, dead, alone, forever.—*Selected.*

Observation.

Dr. Woodman, professor of geology in Dalhousie, and a distinguished graduate of Harvard University, gave a talk to Halifax teachers on the afternoon of March 4th on "Observation." The supervisor, Mr. McKay, in a circular letter, especially lays stress upon the bearing of the "Talk" upon nature study. "The first essential," quotes the letter, "is positive, direct, discriminating, accurate observation; the second essential is to understand why the thing is so or what it means; the third essential is the desire to know more, and the final result is the development of a keen interest in every natural object and phenomenon.

The first purpose of nature study is to interest children in nature. The second is to train them to observe, compare, and express (see, reason and tell); to cause them to form the habit of investigating carefully and of making clear, truthful statements, and to develop in them a taste for original investigation. The third purpose is the acquisition of knowledge.

Nature study is never a task, but a tonic. It recreates. Life, progress and growth are always interesting. This fact can be successfully utilized in the school-room and in out-of-door work in sense training. When the idea of nature study first dawned on the educational world, it was inevitably confused with the sciences on which it was based. Today nature study and science, while they may deal with the same objects, view them from opposite standpoints. Nature study is not synthetic; it takes for its central thought the child, and for its field work the child's environment in nature. We who would teach and inspire the young folks must learn our own lesson before we try to instruct the pupils."

Keep your explanation down to the level of your pupils' minds. A great deal of teaching "flies over the heads" of your pupils. You must learn to talk in household Anglo-Saxon, such as men use in business and women at home.

Seldom repeat a question. Train your pupils to a habit of attention, so that they can understand what you say the first time.

A Star Fancy for a Child.

When summer nights are warm and dry,
The Scorpion with his flaming eye,
Down in the south as twilight grows,
Watches the lily and the rose.

He sees the poppies and the stocks,
The sunflowers and the hollyhocks;
Though all the trees are thick and green,
With his red eye he looks between.

But when the nights begin to freeze,
Eastwards behind the naked trees
Orion lifts his head to spy
Those stars that in the garden lie.

The Scorpion told him how they grew,
Purple and pink and white and blue:
So night by night Orion goes
To find the lily and the rose.

Night after night you see him stride
Across the south at Christmastide:
Though all the fields are white with snow,
He watches for those stars to blow.

But when 'tis near his time to rest,
Leaning his head towards the west,
When April nights are sharp and clear,
He sees those garden-stars appear.

For just before he sinks from sight,
He sees the borders strown with light,
And looking back across the hills,
Beholds the shining daffodils.

—G. Forrester Scott (John Halsham) in the *Spectator*.

Memory Gems.

“Plan not, nor scheme, but calmly wait:
His choice is best;
While blind and erring is thy sight,
His wisdom sees and judges right;
So trust and rest.
Then shall thy tossing soul find anchorage
And steadfast peace;
Thy love shall rest in his; thy weary doubts
Forever cease.

Nothing, that we can make or do in this world, is so important as that which we build along the years in ourselves.

There is no dearth of kindness
In this world of ours;
Only in our blindness,
We gather thorns for flowers.
Each loss has its compensation;
There are healings for each pain;
But a bird, with a broken pinion,
Never soars as high again.

Strong in your work and faith, look ever hopefully onward, upward. No true woman can afford to heave a sigh or drop a tear over life's passing disappointments; for

such trials, when borne cheerfully and with complete resignation to the Divine will, are but rounds in the Christian ladder, by which true nobility of heart and excellence of soul are reached.—(P. C.)

Fill in thy moments well with lofty thought, with kindly word and gentle action, whether thy calling be the heart's choice or sacrifice; if the Master have a partnership therein, success is yours.

I have always thought it my duty to cheer up those who do not look on life as brightly as I do.—(H. P. W.)

CURRENT EVENTS.

A demand for reforms in Macedonia, pressed by Russia and Austria, with the assent of the other powers of Europe, has been readily agreed to by the Sultan. But the Sultan's ability to carry out his promises may be doubted; and it is also doubtful whether any reform of the present administration will make the Macedonians content with Turkish rule.

The presidents of the Central American republics of Salvador and Guatemala have arranged differences, which at the beginning of last month threatened to end in war. But there is a conflict in the republic of Honduras over the election of a president, which may involve one or more of the other Central American states, Salvador on the one side and Nicaragua on the other, being in active sympathy with the contending parties.

An Italian commission which has made a study of yellow fever in Brazil rejects the theory that the disease is transmitted by mosquitoes.

The British expedition against the Emir of Kano, in Northern Nigeria, has been successful. The place was occupied by a detachment of the West African frontier force, on February 3, after an engagement in which the enemy was defeated, but the city was uninjured. The defeated Mohammedan leader has fled to Sokoto, where he may hope for succor, as the Emir of Sokoto is believed to be hostile to the British.

The Sultan of Achin has tendered his submission to the Dutch East Indian authorities. This ends a war of thirty years standing, with but a brief period of nominal peace, between the Dutch and the Achinese; and for the first time gives to Holland peaceable possession of the whole island of Sumatra.

Venezuela has agreed to thirty per cent. of the customs receipts at certain ports being devoted to the payments of her debts. The allied powers, Britain, Germany and Italy, demanded that this amount should be paid to them, leaving other creditors to make their own arrangements with Venezuela now or later; but Venezuela insists that all should share alike in this enforced payment, and this point has been referred to the Hague tribunal. Meanwhile, the blockade has been raised.

The international arbitration tribunal called the Hague tribunal, is not an established court sitting in Holland, as its name might seem to imply. It takes this name from the fact that it is the outcome of an international conference at The Hague, in 1899. Each of the twenty-six nations represented in the convention chooses four judges, to hold office for six years, which means one hundred and four judges altogether. Any two powers thus represented having agreed upon arbitration in a certain case, may refer it to a special court to be selected from these judges, each party choosing two, and these four choosing a fifth. When the special court is so constituted, the five judges meet, not necessarily at The Hague, to hear the arguments and decide upon the matter at issue.

The rebellion in Venezuela is again assuming such proportions as to threaten the overthrow of the Castro government. In the interval between the raising of the blockade and the return of the ships captured by the allies, the insurgents are said to have landed a considerable quantity of supplies for carrying on their campaign.

The report of the death of Bu Hamara, leader of the insurgents in Morocco, has been contradicted; and it is now said that the government forces have suffered another defeat.

Pope Leo XIII. has completed the twenty-fifth year of his pontificate.

A special colony of two thousand farmers and agricultural laborers from Great Britain is coming to settle in the Canadian Northwest. Many other British settlers will also come this year; and it is the first year in the history of the country that has seen the influx of settlers continued through the winter months.

The Alaskan boundary commission will meet in London. The President of the United States has appointed three commissioners. Of the three British commissioners, yet to be chosen, it is expected that two will be Canadians.

It has been freely said in Canada that two of the three commissioners selected for the United States are not "impartial jurists of repute," as required by the treaty; but are strongly prejudiced against the Canadian contention. Assuming this to be true, and that the two Canadian members, if such are appointed, may be as strongly biased in favor of the Canadian claims, an arbitrary court so constituted might still give a final decision; for it is hardly supposable that there will not be at least one on each side to give a fair and impartial judgment on the evidence submitted, and the agreement of these two would give the required majority. It is to be hoped that such an agreement can be reached, and the long standing dispute ended; though the strip of Canadian or Alaskan territory in debate is of very much less commercial importance now than it was when the matter came before the Joint High Commission at Quebec, in 1898. The change is due partly to the

fact that the first rush of gold seekers is over; but chiefly to better communication and increased trade between British Columbia and the Yukon Territory, in consequence of which the trade of the Alaskan ports of Dyea and Skagway has greatly fallen off. Apart from questions of fact and interpretation, which alone can come before the arbitrary commission, it would be of more value to Canada to gain access to a navigable channel among the fords of Alaska than it would be to the United States to retain the half abandoned sites of a trade that is now diverted.

Sir Oliver Lodge has thus illustrated the idea of the relation of electrons to atoms: Imagine a church 200 feet long, 80 feet wide, and 50 feet high; and scattered throughout the interior of this a thousand little electric charges, each the size of the ordinary full-stop of the newspaper. That is how electrons feel inside the atom; but they occupy the atom, nevertheless, as soldiers occupy a country; they make it impenetrable by reason of the forces they exert.

The Canadian Pacific Railway Company has purchased 14 steamships for the trans-Atlantic route, which, with those of the present trans-Pacific service, will give a continuous line from Great Britain to China under the company's management.

SCHOOL AND COLLEGE.

A Teachers' Association has been formed in St. John, having for its objects social intercourse and improvement. Mr. W. J. S. Myles is the president and Mr. M. D. Brown the secretary.

Inspector G. W. Mersereau has finished visiting the schools in Restigouche County, and will give his attention to the schools of Northumberland County this month.

A large number of the friends of Inspector and Mrs. W. S. Carter gathered at their residence in St. John on Thursday evening, March 5th, and presented them with two handsome pieces of cut glass on the occasion of the fifteenth anniversary of their wedding.

Inspector L. S. Morse will visit schools in the Annapolis Valley until the 10th of April. During the latter part of that month he will attend to the schools on Digby Neck and on Long and Briar Islands.

Inspector Carter has completed his visitation of the country schools of Charlotte and St. John Counties, and is now inspecting the schools of the City of St. John.

Miss Lela B. Reagh, the teacher of the intermediate department of the graded schools at Middleton, Annapolis County, N. S., has resigned her position for the purpose of taking a much-needed rest. Miss Reagh has been in constant service as a teacher for about thirteen years, several of which were in the position which she has now resigned. She was a highly efficient teacher, and her resignation has been accepted with regret. Her position

has been filled by Miss Etta M. Elliott, who also has the reputation of being an efficient teacher.

As before reported in these columns, Middleton, Annapolis County, has been chosen as the site for the school to be established in Nova Scotia as an object lesson for that province by means of funds appropriated for the purpose by Sir Wm. C. MacDonald. Seven adjoining sections have united with Middleton. Plans are now being prepared for the new school building for the united section, and work will be commenced on the same immediately. The old school building will not be used in connection with the new school. Prof. Robertson, who has the matter in charge for Sir Wm. C. MacDonald, is determined to make this scheme a success, and funds will not be wanting to accomplish this object.

Rural school gardens are to be established at five centres in the County of Colchester, N. S., under the inspection of Mr. Percy J. Shaw, who is now studying at Cornell University. Prof. Robertson, of Ottawa, in an address last month at Truro, named the sections which had been chosen under Sir Wm. MacDonald's scheme for these rural schools which are to be placed at Belmont, Bible Hill, Old Barns, and Brookfield. The locality for the fifth has not yet been chosen. There is much enthusiasm in the county in regard to these schools, which are similar to those which will be started in Carleton County, N. B., with Mr. John Brittain as inspector.

The following changes have been made in the Yarmouth, N. S., schools: Mr. W. F. Kempton takes the place of the late Principal Cameron as principal of the Academy, and Mr. Bingay takes charge of Mr. Kempton's school, until the end of the term. Mr. Judson Moses, of Hebron, has been appointed in Mr. Bingay's room in the Seminary.

Miss Harriette Bolt, teacher of the Mascarene school, St. George, N. B., recently held a social, at which \$22 was realized towards paying the cost of introducing manual training into her school.

Through the efforts of Miss Ruth L. Reid, principal of the Superior School at Centreville, Carleton County, and Miss Blanche Ebbett, the teacher of the primary department, the sum of \$30 has been raised, which will be expended in the purchase of a flag and school apparatus. A Teachers' Club was organized recently at Centreville. Miss Blanche Ebbett was elected secretary.

Miss Vernia R. Perkins, the teacher at Debec, Carleton County, has succeeded in raising eleven dollars for the purchase of chemical apparatus.

The Canadian teachers who have been preparing to take charge of the work in the consolidated and rural schools to be established by Sir W. C. MacDonald and Professor Robertson, have left Cornell for Columbia College, New York, where they will take a special course in the Teachers' College, to last six or seven weeks. They have been at Cornell for the past two months, and will finish their course in the Agricultural College at Guelph, Ontario.

In the severe epidemic of typhoid fever that has prevailed at Cornell University, sixteen students have died, and many others are sick. Among the latter is Mr. J. W. Hotson, M. A., one of the Canadian party of students. He left for his home in Ontario after the symptoms became evident.

At the concert and pie social recently held at Barnesville, Arthur E. Floyd, teacher, the sum of \$31.50 was realized, which has been used to purchase blinds, maps, a new teacher's table and other much-needed school furnishings.

RECENT BOOKS.

SHAKESPEARE'S *A Midsummer Night's Dream*. Edited by Laura E. Rockwood, Ph. D. Paper. Pages 100. Houghton, Mifflin & Co., Boston.

This edition of the *Dream* is from the Riverside Literature Series, and contains an introduction, notes at the foot of the page, and a study of the play.

THE SPRAGUE CLASSIC READERS. Book I: A Primer. By Sarah E. Sprague, Ph. D. Cloth. Pages 112. Illustrated. American Book Company, New York.

This is a very attractive reader for the little people, and there is considerable skill and good taste displayed in the material and illustrations. It is carefully graded, and the subjects of each chapter are full of interest and designed to awaken thought. The book is an initial volume of a series of five, and an excellent beginning has been made.

PRACTICAL EXERCISES IN GEOMETRY. By W. E. Eggar. Cloth. Pages 287. Price 2s. 6d. THEORETICAL GEOMETRY FOR BEGINNERS. By C. H. Allcock. Cloth. Pages 135. Price 1s. 6d. Macmillan & Co., London.

The first named book is an attempt to adopt the experimental method to the teaching of geometry in schools. The main object is to make the student think for himself, to give him something to do with his hands, for which the brain must be called in as a fellow-worker. It is the laboratory method applied to the mathematical class-room. The second book contains the substance of the first book of Euclid, with the order of the propositions and the proofs in many cases different from his. Several additional propositions have been added.

PRACTICAL EXERCISES IN LIGHT. By Reginald S. Clay, B.A. (Cantab.), D.Sc. (Lond.) Cloth. Pages 187. Price 2s. 6d. Macmillan & Co., London.

A series of very interesting practical exercises in Light, well arranged and illustrated, the apparatus, with a single exception, being of the simplest description and such as can be prepared by teachers and pupils.

CORNELLE'S *Cinna*. Edited with introduction and notes. By John E. Matzke, Ph. D. Cloth. Pages 128. D. C. Heath & Co., Boston.

In his preface the editor says that his purpose has been to treat this play as a piece of literature. The introduction

THE CUCKOO CLOCK. By Mrs. Molesworth. Cloth. Pages 126. Price 1s. Macmillan & Co., London.

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ELEMENTARY CLASSICS: *Cornelius Nepos*, Vol. II, by H. Wilkinson, M. A., and *Quintus Curtius Rufus*, Bk. VIII, by C. J. Phillips, M. A. Price 1s. 6d. each. Macmillan & Co., London.

These two volumes in the convenient Elementary Classic Series contain explanatory introduction and notes with an adequate vocabulary.

MACMILLAN'S STORY READERS (Macmillan & Co. London) are collections of stories for children, in which kindness to animals is a special feature. The first, or introductory book (price 8d.) is in large, clear type. It contains a discussion of the sources of the play and other questions of literary interest. In the notes, points of literary interest and gossip have been freely admitted, and all allusions have been carefully prepared. The play affords the student an excellent field for the study of linguistic difficulties.

MACMILLAN'S GLOBE GEOGRAPHY READERS. By Vincent T. Murché. (1) Introductory: Pages 119. Price 1s. (2) Junior: Pages 194. Price 1s. 4d. Macmillan & Co., London.

The first or introductory reader has lessons written in simple style, and illustrated, confined to the observation of a few natural objects and the phenomena of everyday life. In the second or Junior reader the field of observation is enlarged, the pupils being led to consider the various forms of land and water, the sea, hills, valleys, rivers, islands, lakes, etc., one lesson growing naturally out of another.

ANNO 1870. By Detlev Von Liliencron. Edited with introduction, notes and vocabulary by Dr. Wilhelm Bernhart. Cloth. Pages 138. D. C. Heath & Co., Boston.

This is a glimpse, with dramatic episodes, of the famous times in which within 180 days the Germans had fought seventeen great and 156 minor battles, made 385,000 prisoners of war (including 11,650 officers), had taken twenty-six fortresses, captured 120 eagles and regimental standards, and carried off 6,700 cannons. The student of the German language, if he has the military spirit, will find the book to his liking.

MARCH MAGAZINES.

Captain A. T. Mahan opens the March *Atlantic* with his recent address on The Writing of History—a remarkably sound and stimulating paper which will be eagerly welcomed. John Burrows follows with a paper on Real and Sham Natural History, in which he characterizes with outspoken and delightful pungency the utterances of certain writers whom he considers sham naturalists. Another striking and important article is the second of President Arthur T. Hadley's notable papers on Academic Freedom in Theory and Practice.... There is a wealth of good reading matter in the March *Canadian Magazine*. The Hon. Clifford Sifton writes of The Needs of the Northwest, pointing out that the period of experiment has passed, and that the settler who now goes to the west goes with a certain and absolute prospect. J. M. Jackson writes of Ice-boating on Toronto Bay, and Katherine Hale tells some interesting things about Albani, the Canadian prima donna. There are three excellent short stories by Philip Marche, Hubert McBean Johnston and Frank Ford.... A charming sketch of the school colony at Mandres-sur-Vair, sustained by the XIth arrondissement of Paris as a summer resort for its school children, appears in the *Living Age* for February 21st, from the pen of Sir Edmund Verney. The *Edinburgh Review's* careful and appreciative criticism of Mr. Henry James's novels is attracting much attention among English readers. It is reproduced entire in the *Living Age* for March 7th.... A subject of the greatest importance to those who would be correct in social matters is the quality of their stationery. One is judged almost as much by the external appearance of a letter as by the contents, and in this regard, as in all others pertaining to the usages of polite society, there are certain prescribed rules. In fact, there are fashions in stationery as in dress. A feature of the March *Delineator* is a display of fashionable stationery, showing various shapes of envelopes and sheets, and examples of address headings and crests. Mourning borders, as well as the quality and color of paper, are referred to, and altogether it is an interesting page.... Among the leading features of the *Chautauquan*, the article entitled, The Danger Line in Western Asia, sets forth clearly the long unended struggle between England and Russia for the prize of India and the control of the East. This month's instalment of *Studies in English* is a valuable one and of much benefit to writers of our language.

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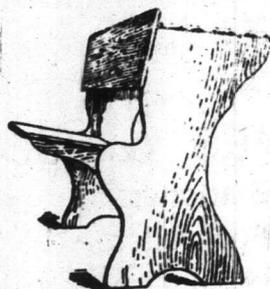
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