

PAGES

MISSING

The Educational Review.

Devoted to Advanced Methods of Education and General Culture.

PUBLISHED MONTHLY.

ST. JOHN, N. B., JULY-AUGUST, 1909.

\$1.00 PER YEAR.

G. U. HAY,
Editor for New Brunswick.

A. MCKAY,
Editor for Nova Scotia.

THE EDUCATIONAL REVIEW.

Office, 51 Leinster Street, St. John, N. B.

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

CONTENTS:

Editorial	33
Hints for the First Day	34
Educational Changes	35
P. E. Island Educational Convention	48
Death of Simon Newcomb. (Portrait)	36
Teaching Children How to Study	37
Lessons in English Literature.—X	40
The Tongues of Our Birds	43
The Problem of Study	45
College Anniversaries	46
The Mayflower	35
For Friday Afternoons	49
The World's Longest Road	50
Memory Gems for Character Building	51
Current Events	51
The Review's Question Box	53
Manual Training Department	54
School and College	55
Recent Books	58

NEW ADVERTISEMENTS.

Mt. Allison Ladies' College, p. 55; Mt. Allison Academy, p. 55;
Charlotte County Institute, p. 55; Chapman & Co., p. 59.

THE EDUCATIONAL REVIEW is published on the first of each month, except July. Subscription price, one dollar a year; single numbers, ten cents. Postage is prepaid by the publishers, and subscriptions may begin with any number.

When a change of address is ordered, both the new and the old address should be given.

If a subscriber wishes the paper to be discontinued at the expiration of the subscription, notice to that effect should be sent. Otherwise it is assumed that a continuance of the subscription is desired. It is important that subscribers attend to this in order that loss and misunderstanding may be avoided.

The number accompanying each address tells to what date the subscription is paid. Thus "267" shows that the subscription is paid to Aug. 31, 1909.

Address all correspondence to

THE EDUCATIONAL REVIEW,
St. John, N. B.

More than five thousand teachers in the Maritime Provinces will begin their work anew this month or next. Of these probably one-tenth have never taught school before. Some may fail, but the perseverance, native strength and buoyant temperament of youth make it possible for all to succeed. We hope there will be few failures. Thoroughly prepare for the first day. Know definitely what to do. Keep the children busy. Do not find fault. Be pleasant and give the children a happy day. Be earnest, sincere and as capable as possible to manage every situation that may arise. A successful "first day" will help to make a successful term.

THE Canadian Forestry Association will hold a special meeting at Regina, September 3rd and 4th. There will be a good programme of papers and addresses dealing with forestry conditions of the West.

THE accounts of the closing exercises of our colleges, which are continued from the June number, and the advertisements of our higher institutions of learning, should interest teachers and scholars. There are ambitious teachers who need the stimulus and training that the college alone can give; there are bright pupils to whom a word fitly spoken by the teacher will awaken the ambition to take a college course. These pupils will pursue their work with more of a purpose and become the teachers best helpers. Do not be afraid of over-education. There is no such thing. No one can have too much education—of the right kind.

Few men can boast of longer service in educational work than Mr. J. George Hodgins, historiographer of the education department of Ontario. He is now in the 88th year of his age and in the 65th year of actual service. The REVIEW extends its congratulations to Mr. Hodgins on his lengthy and honourable career, and hopes that he may become a ripe nonagenarian with a capacity for work to the last.

THE length of the summer vacation in the country schools of New Brunswick is now eight weeks, equal to that of the city schools. This is but a simple measure of justice.

THE beautiful picture supplements sent out by the REVIEW for several years past have been greatly appreciated by teachers who use them for story and composition work for every grade, and for the decoration of the schoolroom. For the latter purpose they may be framed inexpensively according

to directions in a recent number of the REVIEW. When such good use is made of them as indicated above, we do not mind the added cost of their production and postage. It is much more expensive to send these out in supplement form than printing them in the body of the paper, and the postage on the paper containing the supplement is four times greater than without it. If teachers will appreciate the effort to give them the best in the very best form, the added expense will not be regretted.

The choice of supplement for this month is one that will interest children when they compare a French primary school with one of our own.

Hints for the First Day—and After.

The simplicity of the lesson in raffia work, given by Mr. Kidner in this month's REVIEW, will tempt teachers to make a trial of it. Many schools are doing work of this kind, and in others the teachers need only a little instruction to begin. Mr. Kidner has promised to furnish half a dozen articles to aid these beginners. A little elementary manual work of this kind will help to solve the problem—How can I make my pupils interested in their school work? Have a shelf neatly covered with cloth or paper with a frill hanging over the edge, and have the best of children's work displayed on it. This will help to ornament the schoolroom by the best of all ornaments—the children's own work.

A bouquet of wild or garden flowers not too "set," but arranged with taste should be on the teacher's desk,—fresh ones every morning. A committee of the older children to arrange for these every week would divide up the work and create a generous rivalry between the committees of each week as to which shall furnish the greatest variety and best arrangement.

Drawings on the blackboard should not be left there too long. Change them often, and try to have something that the children are interested in and are thinking or talking about—a common bird, a sheaf of wheat, a common wild flower, a butterfly, a motto for Labour Day—anything that is appropriate or seasonable. Coloured pictures of flowers, groups of birds or animals make an attractive border for the top of a blackboard, to

which the pictures may be pasted or pinned. In short, make the school as bright and attractive as possible. It pays to have an atmosphere of neatness and refinement, and it is much easier to teach in a clean, pleasant, cozy room.

One is not surprised to hear that noisy, restless pupils are found in a room with bare walls, uncurtained windows and dirty floors. How can a teacher let such a condition exist for a single hour, when perhaps her whole future success depends on transforming such a room and making it look "just like a parlour!" It is worth while to make an effort every day to have clean surroundings; neatly dressed children, a pretty picture here and there on the walls portraying something interesting to children, such as the supplement in this month's REVIEW, and to have that indefinable look of comfort and prettiness that appeals to the heart of every child. And children will make an effort every day to live up to these surroundings if teachers will make them sharers in the good work of making the schoolroom "look nice."

And when clean, tidy and wholesome surroundings prevail in the schoolrooms, it will be easy for the teacher to exercise a check on the pupils' conduct out of school, especially as to their language on the streets or roads. Interest the boys of the country in some athletic games or useful occupations that will make them despise the too common practice of lounging around a corner grocery or other popular resort. Teach them to respect the beauty of shrubbery and trees along paths and highways. To mutilate trees by carving one's name on the bark gratifies a very low ambition, and spoils the beauty of the tree for all time to come, even in the eyes, later in life, of the one who sought "glory" in this way. Beautiful white birch trees are often ruined in this way or by cutting sections of the bark to make a drinking cup. A few days since a magistrate in Fairville, N. B., fined a lad \$25 for peeling off the bark of a white birch tree. "Served him right" will be the verdict of all who like to look upon beautiful things in nature; for had there not, to gratify a mere idle instinct, been left a blemish in a public place that would mar its beauty for years to come!

Educational Changes.

Following the resignation of Dr. J. R. Inch, who has so long and so honourably filled the post of chief superintendent of education in New Brunswick, the government appointed Inspector W. S. Carter to fill the vacancy. No better selection could have been made. Mr. Carter is still in the prime of life; he has been a capable teacher and inspector, and is a man whose views on educational questions have always commanded respect and attention. His executive abilities are of high order. He is possessed of much natural ability, readily grasps the details of public questions, and is prompt in his decisions. He is a ready and convincing speaker, and at times becomes impressive in his logical array of arguments. His knowledge of the educational conditions of his native province is exact, and founded on careful judgment and experience. As the chief educational officer of New Brunswick, he may be relied on to fulfil his duties with tact and discretion, and to suggest, as the government's adviser, a wise, salutary and progressive educational policy.

The position of inspector of schools for St. John and Charlotte Counties, made vacant by Mr. Carter's elevation to the chief superintendency, has been filled by the appointment of Principal W. M. McLean, of the Aberdeen school, St. John. Mr. McLean has had a long experience as teacher, extending over nearly forty years. He has been a painstaking teacher, popular with his fellow-teachers and students, all of whom are glad to hear of his promotion. As president of the New Brunswick Teachers' Association, Mr. McLean has done excellent service in urging the claims of teachers for pensions.

The following extract is from the *School News*. Is not the third kind of teacher the one whose acquaintance should be cultivated?

There are three kinds of teachers who have "good order" in schools:—first, the one who coerces the weaker body or will of the pupil and compels him to keep still; second, one who by coaxing or other form of personal influence secures the same or a better state of order; third, the one who teaches by discipline and disciplines by teaching; who instead of compelling or persuading children to behave, leads them to want to behave; who causes them to have a desire for learning rather than to bribe or drive them to study. This is the best discipline for the teacher and the best for the school because it is the best for the individual pupil.

The Mayflower.

Very pretty are the legends and associations clustered about the Mayflower, to which, rather than to the season of blooming, it is indebted for its name; for in middle latitudes it is more often an April than a May blossom. In an introductory note to his beautiful poem, Whittier states that it was the first flower that greeted the pilgrims after their fearful winter; also that some credit to them the common nomenclature, in memory of the frail vessel to which they owed so much.

Its season of blooming varies much in different localities, and is in most sites less ephemeral than that of most spring blossoms. As the buds form in autumn on the evergreen branches they are prepared to unfold on short notice. Thus we are accustomed to hear them associated with melting snow banks—a not exaggerated statement as it applies to some parts of New England, but in the Middle States they more often wait for the spring beauty and adder's tongue to take the initial step. And those not familiar with the habits of the plant might pass its shell-tinted blossoms many times without suspecting their presence unless betrayed by the perfume, for the most richly coloured ones are completely hidden by the covering of brown leaves.

The Mayflower exhibits a peculiar trait known botanically as *dimorphism*. There are two kinds of flowers, some with long stamens and short pistil, others with the relative length of the essential organs reversed.

The variations in form have been the subject of much interesting comment among botanists, and it is evident that the plant is in a transitional state. The bluets and partridge berry show the same interesting habits.—*Selected*.

[According to the writer's observation the Mayflower rarely develops seed, and many students of plants have had the same experience. It may be that it develops seeds in certain seasons, and that other years are "off" years. Professor Benoit, of Truro, a few weeks ago sent some finely developed capsules, full of seeds which were found by Miss Ruth B. Simpson, Dartmouth, N. S. A. H. Hannington, Esq., St. John, reports finding fully developed seeds near Nerepis, N. B. A few years ago some well filled capsules were received from Principal Soloan, Lake Annis, N. S. It may be that Mayflower seeds are commoner than has been supposed. To settle this point it is worth while to look more carefully for them.—EDITOR.]



SIMON NEWCOMB.

Death of Simon Newcomb.

Simon Newcomb, one of the greatest astronomers of the world, a Canadian by birth, died in Washington on the 11th of July, at the age of seventy-four years. Professor Newcomb was born at Wallace, N.S., lived for several years at Salisbury, N.B., and finally went to the United States, became a school teacher, worked his way through Harvard College, entered the United States navy as professor of mathematics, and afterwards was placed in charge of the naval observatory at Washington. His writings embrace over a hundred papers, and include especially most exact tables of the motions of

the planets. He also published a treatise on astronomy and several volumes on political economy. He was a fellow of the Royal Society of London, and received the doctor's degree from seventeen of the most prominent universities of the world.

In Denmark in the summer the children from the city are sent to school in the country and those of the country are sent to the city schools for a time, the parents making a temporary exchange of children. Twenty thousand children, ten thousand of each class, are thus given a chance to experience life alternately in Copenhagen and in the country round about the city.

Teaching Children How to Study.

By H. P. DOLE, M. A., Sussex, N. B.

A prominent educationalist of this province, in an address before a teachers' institute, is reported to have said that "in former times the teacher heard the pupil recite the lesson, but that now-a-days the pupil listens to the recitation of the lesson by the teacher." While this remark may not have been intended as a literal expression of the modern trend of education, yet we must concede there is enough truth in the saying to make us pause and study the situation in an honest endeavour to discover, if possible, the causes of these two extremes.

In the rural ungraded schools the multiplicity of classes and other unfavourable conditions may be cited as an excuse for the teacher becoming a lesson hearer. Indeed, many of our most distinguished men owe their early training to such schools as these. On the other hand, the graded city and town schools furnish the teachers with more time for conducting lessons, and in their efforts to simplify, explain and enlarge upon the subjects taught, the mistake has been made of having the teacher do too much and the pupils too little of the studying process.

While it is true that many pupils will make excellent progress in spite of methods used, yet educators are beginning to realize, as never before, the necessity of applying systematic psychologic methods which will develop in pupils the power of independent thought and study to a degree unattainable under either of the above-mentioned methods of teaching. Within the limited scope of the present article, it is the aim to discuss ways and means of accomplishing these results.

Of the two kinds of study—the mechanical or mind-cramming, and the positive or thought-provoking—I shall confine myself to the latter; and in the treatment of this phase of the problem frequent reference will be made to the experimental work along these lines by Miss Lida B. Earhart, Ph. D., of Teachers' College, New York.

After considering the logical basis of the process of the inductive and deductive studying processes, I shall briefly discuss the possibility of securing results from pupils of the elementary grades of our schools. Among the factors involved in systematic study, may be mentioned:

I. The recognition of the problem to be solved. The teacher's ability will here be shown in so intro-

ducing the subject-matter that it presents a real and vital problem to the child. The pupil must make it his own if he is to do serious and profitable work in its solution. In the words of Professor Dewey, "the teacher must psychologize the material," that is, create the situation for the child so that the problem suggests itself to his mind. This problem must be clearly understood by the pupil, even if it involves reflection, reading, consultation, experimentation and observation to accomplish this end. Tentative hypotheses may even at this stage be suggested as positive solutions of this problem.

II. A second factor is the collecting of data bearing upon the problem. The pupil should be trained to select the sources of the material, and, above all, to confine his research to data bearing upon the problem in hand. If the school has no library, the teacher should have a few good works for reference in the schoolroom. It will here be interesting to note that recent regulations have been made in Ontario whereby certain subjects—notably elementary geometry—must be taught without the use of texts, and the school boards are compelled to provide reference libraries in these subjects—thus rendering the mechanical cramming of text-book facts a difficult method of procedure for the incompetent teacher.

III. The material thus gathered should be organized into groups of related ideas. A practical and effective plan is to tabulate the main headings, each having its subordinate points grouped beneath. As a result of II and III, it will be possible for the pupil to formulate a theory which will satisfy the problem.

IV. A fourth element is one of scientific doubt. Pupils should be taught early in life that authors are often apt, consciously or otherwise, to present their case in a one-sided manner. Having collected data from a suitable number of sources, the weighing of the evidence thus adduced furnishes one of the best possible means of developing the pupil's individuality and self-reliance.

V. When the vitality of the data has been decided and the tentative hypothesis formulated, the next logical step is the application of the theory to the concrete situation. If the theory be found faulty or incomplete, it will here be in order to revise it until it meets the conditions of the original problem, or in case the first theory will not work, a

new one must be substituted, and the same procedure followed throughout.

VI. Memorizing is the next factor in order to fix the data which will be needed in the solution of higher problems. But this memorizing has already been, in part, accomplished during the thinking process, and is completed by reviewing the related ideas in their logical order.

VII. Care should be taken to call forth the initiative of the pupil at every stage in the study process. The teacher's most difficult task will be to eliminate herself. Every class will need a wise leader to direct the work, and, if necessary, to keep them from wandering from the problem; but in no case should the teacher formulate, discuss and solve the problem—in other words, "recite the lesson"—for the pupils. Free and easy class discussion, when all are intent upon the solution of a common problem, will be found more beneficial from every point of view than the formal individual question and answer method—the "lesson hearing" plan.

The above fundamental principles will be found applicable, either in whole or in part, to every inductive subject. Deductive study, or the application of accepted principles to concrete examples, will differ from the inductive, in that the problem is not the formulation of a theory, but the "identifying of a fact with some group of facts for which a satisfactory theory already exists." There will, however, be found the same necessity for understanding the problem, judging the adequacy of the theory, application of theory and memorizing as in the inductive process. Here, again, is an opportunity of developing initiative and individuality of the pupil.

The study of a text-book, such as history or grammar, for example, involves the same steps as are outlined above, the former giving splendid illustrations of the inductive, the latter of the deductive process of reasoning.

At what age or in what grade may we then expect pupils to consciously employ and profit by the use of logical steps of inductive and deductive study? In reply, I have but to quote from the results of Miss Earhart's investigations, in which she proved that not only was there a marked improvement in grades VI and VII, when logical methods were used, but that even grade IV were able to do independent study of a high order. To quote her own words: "This series of lessons showed plainly that

pupils in the fourth grade are capable of finding problems for themselves, of organizing the lesson, of asking intelligent questions, of forming sensible hypotheses, of exercising judgment as to the statements made by the author, of mastering formal difficulties for themselves, and in various ways of exercising initiative wisely and profitably. It shows, too, that when pupils work in such a way, they work with zeal, and accomplish much more than is done when they must spend time upon useless details and mechanical methods of working."

Since it is possible, then, for the ten-year-old pupil to use logical methods of study, there seems no valid reason why better results have not been obtained in our schools, unless the fault lay with the teaching staff. Our inspectorial reports have for years contained references to the mechanical methods used in many of our schools, yet I doubt if the situation here is any worse than in similar localities in the republic to the south. Miss Earhart not only secured through questionnaires the teaching methods adopted by many American teachers, but by actual visitation observed these teachers in the classroom, and reports the results in the following language: "The conclusion is forced upon us that although pupils possess the ability to employ the various factors of proper study, the teachers lack a clear conception of what such study is. The teachers who wrote the questionnaire do not themselves employ these factors to any great extent, and the teachers observed in the classrooms are not training their pupils to use them. The teacher is the centre and moving power in nearly all of the work, and the requirements laid upon pupils involve mechanical effort to a large degree. The aim of the work seems to be the mastery of subject matter; the development of the power to work independently, intelligently and economically is almost entirely ignored. The teachers do not know of what such study consists, and consequently give little thought to its cultivation. They would probably do so if they had definite ideas as to its nature, for they are frequently heard to lament the fact that their pupils do not know how to study or to think."

While no experimental work of the above nature has been attempted in Canada, yet it is safe to hazard the guess that our conditions are little, if any, in advance of our progressive American cousins. All must agree that the training of pupils, even in the lower grades, for independent and profitable study is far ahead of much of the present-

day method of mechanically presenting bare and isolated facts from the prescribed texts, and by compulsion or bribe to effect the mastery of sufficient subject matter to enable the pupils to successfully write certain fixed examinations within a limited time—even if pupils by this process imbibe a veritable hatred for study of any sort and forthwith proceed to forget as rapidly as possible the mixture of disconnected and too often unimportant material stored within their brains.

Braves of the Nation.

Go ye, braves of the nation,
Strong for the battle and brave;
Go ye o'er valley and mountain,
The banner of light to wave;
Go ye, our teachers—our warriors—
A nation to make—and save.

Go ye, builders of empire,—
Thine is a kingly estate;
Go ye unlaureled, uncrowned,
With thee true glory shall wait;
Go, and build nobly and strongly,
Much power on thee is sate.

Go we, honoured and blessed,
Heralds of the future to be;
Ye are moulders of children,
Our hopes are rested on thee;
Go ye, the braves of our nation,—
Ye rulers of destiny.

BURL NEVERS.

Red Deer, Alberta.

From one-sixth to one-fourth or even one-third of the whole school time of American children is given to the subject of arithmetic, a subject which does not train a single one of the four faculties to develop, which should be the fundamental object of education. It has nothing to do with observing correctly, or with recording accurately the results of observation, or with collating facts and drawing just conclusions therefrom, or with expressing clearly and forcibly logical thought. Its reasoning has little application in the great sphere of the moral sciences, because it is necessary and not probable reasoning. In spite of the common impression that arithmetic is a practical subject, it is of very limited application in common life, except in its simplest elements. On the whole, therefore, it is the least remunerative subject in elementary education now conducted.—*President Eliot.*

To Wordsworth.

Poet of calm,—like to a mountain mere,
Embosomed deep within some leafy dell,
Even that by which thou long ago didst dwell
Among the solitudes of loved Grasmere—
If to thy quiet soul we would come near,
As men who leave the place where traffic goes,
For rural heights where lakes lie in repose,
Must our feet wander from the tumult here.

Then like elated travellers who see,
By peaceful shores reclined, each mirror face
Reflect the trees and hills and starry skies,
Are they who view this wondrous world in thee—
What tender touches everywhere they trace;
What hidden glory round their pathway lies!

—*Rev. A. L. Fraser, Great Village, N. S., in Westminster, Toronto.*

Correct the following expressions and state in each instance what the error is:

1. She is taller than me.
2. There is no use talking about it.
3. They came for my sister and I.
4. He acted like he was frightened.
5. There is nothing to prevent him coming.
6. You learn faster than him.
7. Read to me like you did yesterday.
8. Either he or his wife have stolen my hat.
9. My case is different than yours.
10. Who does this state belong to?
11. Be industrious, like I am.
12. Come along with William and I.
13. I am not as tall as he.
14. There is no other way but this.
15. I do not deny but what he is honest.
16. He is a friend whom I am indebted to.
17. Who did you give the money to?
18. This is nothing else but robbery.
19. I did not know but what you were angry.
20. You ran between my sister and I.
21. I doubt if he will come to-day.
22. She is older than either you or him.
23. His preaching is different to his practice.

I hold that a man is only fit to teach so long as he is himself learning daily. If the mind once becomes stagnant, it can give no fresh draught to another mind; it is drinking out of a pond instead of from a spring. A schoolmaster's intercourse is with the young, the strong, and the happy; and he cannot get on with them unless in animal spirits he can sympathize with them, and show that his thoughtfulness is not connected with selfishness and weakness.—*Arnold.*

Lessons in English Literature.—X.

BY ELEANOR ROBINSON.

Sir Thomas More's "Utopia."

The sixteenth century was a wonderful time of learning and of making books. There were two chief reasons for this. In the first place, for some time great sailors and explorers, from Italy, from Spain and Portugal, and from England, had been pushing their way further than ever before, both east and west. Columbus had discovered a new world across the ocean. Portuguese sailors had dared to sail round the Cape of Good Hope. The Cabots had explored the coast of our own country. People in the Old World were roused to wonder and curiosity by tales of new lands and new races of men. The world was larger than they had thought; there were more and different people in it. There were new animals and plants, new ways of living, to be studied.

And secondly, almost at the same time that men's minds were being excited by the wonders of a new world, their thoughts were turned also towards the old learning that had been almost forgotten. For the greatest learning and the best literature there had ever been was that of the Greeks; and for many, many years the Greek language and books had been neglected by the people of Western Europe. Even the learned men did not read Greek; it was not studied in the universities. But now, towards the end of the fifteenth century, Greek scholars, whose country had been conquered by the Turks, had begun to flock into Italy, bringing with them their books and their wisdom. The Italians welcomed them gladly, and Italy became a home for Greek learning. All the history and poetry and philosophy that the great writers of Greece had left was eagerly studied. And not by the Italians only; people went to Italy from other countries to study the "New Learning," as it is called, and especially many Englishmen. They brought back their knowledge to England. Greek was taught in the universities of Oxford and Cambridge, and all the knowledge that the wise Greeks had stored up lay open to English students.

Now no one is much the better, either for travelling or for studying books, unless they make some good use of what they learn by it. Happily, there were some good and learned men in England at

this time, whose great desire was to do all the good for their country that they possibly could. They were not satisfied with simply accepting what other people wrote or told them, and just keeping it stored up in their own minds. They looked about them, and saw many things that were wrong in the lives of their countrymen, in the government, and in the religion, and they used their learning to try to make things better. They thought that the great good of knowing Greek was that they might study for themselves the New Testament (which, as you know, was written in Greek), and find out exactly what Christ and His apostles taught, so that they could better follow His teachings. Some of them who were in high offices in the church tried to reform the lives of the clergy. Some taught in the universities; some founded schools.

One of the best and most famous of this band was Sir Thomas More. He was a very learned lawyer, and high in favour with Henry VIII, who made him Lord Chancellor in 1529. But afterwards he displeased the King by refusing to say that Henry was right in proclaiming himself head of the English church, and in putting away Queen Katherine and marrying Anne Boleyn. For this he was beheaded in 1535.

More saw very plainly, and with much sadness, the evils of his time, and he longed to do away with them. He said once to his son-in-law: "Would to God that I were put in a sack and cast into the Thames, upon condition that certain things might be established in Christendom." Two of these things were: that all Christian kings and princes might live in peace, and that the church of Christ might be united and free from all errors. He wrote his book, "Utopia," to show how happy a country might be where the people lived and were governed after the plans that he had in his mind.

The book was written in 1516, in Latin, for most people who could read at all could read Latin then; but about forty years later it was translated into English. It begins by telling how, when More was at Antwerp on the King's business, he met one day on coming out of church "a certain stranger, a man well stricken in age, with a black sun-burned face, a long beard and a cloak cast about his shoulders, whom by his favour and apparel forthwith I judged to be a mariner."

His friend, Peter Giles, introduced him to this stranger, whose name was Raphael Hythlodaye, and who had been a great traveller. They went to

More's garden, "where, sitting upon green turfs," Raphael told them of what he had seen. More says that they were not inquisitive to hear about monsters and strange or incredible things, because that was no news. But they asked him about how other nations lived and were governed. For, he says,

To find citizens ruled by good and wholesome laws, that is an exceeding rare and hard thing. But as he marked many foolish laws in these new found lands, so he rehearsed divers laws and constitutions whereby these our cities, nations, countries and kingdoms may take example to amend their faults, enormities and errors.

More asked Raphael if he had ever been in England. He said he had for four or five months. He goes on to tell what he thought of the government and customs of England, and shows many things in them that ought not to be so. Among other things, he says that thieves are punished by death, and yet there are a great many thieves, and stealing is always going on; and he thinks that the punishment is too severe, and does no good. Rents, he says, are too high; there are too many idle people who must either steal or starve; there are too many soldiers; not enough men working on farms; food and clothing are too dear; the rich are greedy and unjust; too much money is spent on war; the learned men, even the clergy, do not lead good lives. Finally, he says that he had never seen really good government and well ordered people, except in Utopia, where he lived for five years. More asks if he will not tell them all about it, and Raphael says that nothing would please him better, but it will take a long time. So they go in to dinner, and, after they have dined, they come out to the garden again to hear all about Utopia.

This is the end of the first book. And this is the way More takes of telling what he thinks of the state of England. So, in the second book, he tells how he thinks a nation ought to be ruled, by describing the imaginary country, Utopia.

The name "Utopia," means "Nowhere," and the name of its capital, "Amaurote," means "Not easy to be seen." We are not told where it is, but Raphael Hythlodaye says that he was with Amerigo Vespucci on all four voyages, and that he was left behind in the New World when Vespucci returned to Europe, and that he then travelled through and about many countries, of which Utopia was one. Utopia is an island, in the shape of a new moon, and about 200 miles broad at its broadest part. It has fifty-four cities, all built and situated alike, and

no two further apart than one day's walk. In the country there are large and well furnished farm-houses, with room for forty persons in each. The townspeople take turns in living on the farms, so that every man and woman may learn farming, which is an industry very highly esteemed. At harvest time the citizens come out to the farms to help, so that in one fair day all the harvest work is done. Cattle and horses are bred, and corn and fruit are grown.

They bring up a great multitude of chickens, and that by a marvellous policy. For the hen doth not sit upon the eggs; but by keeping them in a certain equal heat they bring life into them and hatch them. The chickens, as soon as they come out of the shell, follow men and women, instead of the hens.

The streets of the cities are wide and handsome, with houses "of fair and gorgeous building" of brick or plaster, and perfectly fireproof. Each house has a large and beautiful garden. The doors are never locked, and anyone may go in, "for there is nothing private, or any man's own." And every tenth year they change houses by lot. The size of families is regulated by law. If there are more children than the law allows in one family, some of them have to be sent to make up the number in a household where there are too few. And in the same way, if the people in a city are too many, some have to move to another city; or, if all the cities are full, a new one is founded.

The prince of the country is chosen by the magistrates, or officers, from four who are named by the people, and he holds his office for life, unless he is put down for tyranny. Other officers of state are changed yearly, but never without due care. The Utopians detest war, and think nothing of the glory gained in battle. But both men and women are drilled so that they can fight, if need be, to defend their country, or to deliver people who are oppressed. They would rather conquer by craft than by fighting. For, they say, beasts fight with bodily strength; but only man can win by the power of his mind. They hold the lives of their citizens too dear to be spent in war. So they hire other people to fight for them. They also offer rewards to those who will kill the princes and leaders of their enemies.

They have slaves, who are obtained in three ways. Those of their own people who are punished for great offences, they treat with great severity. Those who have been condemned to death in other countries they buy, and treat

less harshly, because they have not had as good training as their own people. Those who prefer to come to be their slaves, rather than work hard in some other country, they use very gently, and free them if they wish to be freed.

They set the highest value on good health, say that it is the greatest of all bodily pleasures, and do all in their power to promote it. And if people fall sick, they take great care of them. Their hospitals are so comfortable and so good that any sick person would rather go to one of them than stay in his own house.

Their time is very exactly divided. They work six hours before noon. Then they have dinner, and rest for two hours; then work three hours. Then they go to supper. At eight in the evening they go to bed, and sleep for eight hours. All the rest of the time every person does as he likes. But they do not spend the time idly, but in some useful occupation or study, or in games.

Every one has to learn some trade or craft. A boy usually follows his father's trade; but if he has learned one craft, and wishes to learn another, he may; but he must practise that which is most needed in the city. The great rule is that no one should be idle. But also, they do not allow anyone to be wearied with continual work, like toiling beasts.

The children are carefully instructed, and all lessons are in their own language.

The Utopians dress very plainly and do not change the fashion of their garments; and they despise anything like gay or costly clothing, or ornaments. They use gold and silver for the commonest dishes and pots, and for the chains with which they bind their slaves. And if they want to put wrong-doers to disgrace, they put rings of gold on their fingers and in their ears and hang gold chains about their necks. They have ornaments of pearls and diamonds for their little children; but they teach them that such things are babyish, so when the children grow big, they put them away without being told, as our children do dolls. Once, some ambassadors from another country came to Amaurote, dressed in rich and gorgeous clothes and loaded with jewels, thinking by their finery to dazzle these poor Utopians. But the Utopians looked at them in pity, and thought they must be in disgrace. And the children pointed to them and said: "Look, mother, at that great big man wearing precious stones as if he were a baby." And the mothers answered: "Hush, my son, he must be one of the ambassador's fools."

They think it very strange and foolish to value riches, and very shameful and dreadful to have poor people among them. As for them, they are neither rich nor poor, but have all things in common, and think that the true riches are health, wisdom, goodness and true happiness.

Every man in Utopia may have his own religion and worship in his own way in his own home. But they all go to public worship together, and worship one God and Father of all. In church, all are dressed in white. They sing praises to God, pray to Him, and thank Him for all their blessings.

They teach men to have no fear of death, for they say it cannot please God if His creatures do not run gladly to Him when He calls them.

These are some of the ways of living that Sir Thomas More imagined, and that he thought would be good for England. Some of them, you see, have come about; and some are what many people still hope for. Much more is done to care for health, to cure the sick, and to teach the children, than in More's time. But there is still far too much difference between rich and poor; we still look in vain for universal peace, or for all Christians to be at one in their worship. The best and wisest people to-day are working and praying and hoping for some of the very changes that More wanted to see brought to pass, and his book must always be full of interest to those who think much about our country's welfare.

Swallows.

When daylight fades, and sunset colours dim,
The meadow-land is sweet with evening scent;
And there where flows the brook, in calm content
The cattle wander, grazing by the brim.
Then, joyously the swallows lightly skim,
No longer far up in the firmament,
But, low along the brook, with one consent
Fly back and forth, and oft beneath the rim
Bend darting wing. With twitter soft and sweet,
Up stream and down they go in sheer delight.
So late they linger, dipping thus below
The gleaming surface, they would fain repeat
The joy of that day's gladness in their flight,
By bathing in the very sunset glow.
—Blanche Elizabeth Wade, in the *August Canadian Magazine*.

In railways, Canada has the greatest number per capita of any country in the world.

The Tongues of Our Birds.

By W. H. MOORE.

The human tongue is a member used in articulating sounds, also the organ of taste. In the Epistle of James we read that the tongue is a fire, and that the tongue can no man tame. In Proverbs we find that, "he that hath a perverse tongue falleth into mischief."

The tongues of our birds serve the same purpose as does that of man, but we have few species of birds with perverse tongues. The tongue of the blue jay is as near a mischievous tongue as any of our birds possess, excepting, perhaps, that of the shrikes. (Perhaps the mischief originates in the brain). The tongue of the blue jay will scold, be "sassy," laugh and lie, according to the temperament of the bird. (Read in the earlier pages of Mark Twain's "Tramp Abroad," a humorous account of how the jay is supposed to use his tongue). The tongue of the shrike will lie, for it will give vent to calls in imitation of small birds in distress, and so induce birds to come to the rescue of the fallen one, and thus come within reach and become an easy prey to the deceiver.

It is not only what the tongue can do, but something of its structure, that will be dwelt upon in this article. The tongue of a bird contains a bone which is divided into different parts, each part with a Greek name. These names we will pass by, and just let the parts be collectively known as the hyoid bone or bones. The development of these varies so much in different families, or even in species of the same family, that it is worthy of our study and attention. But this part of nature study cannot be thoroughly investigated with the birds afield. Students who may happen to be near a taxidermist's establishment may get abundant material for study.

The tongue of the cormorant is a worthless looking affair, but no doubt perfectly serves its purpose. In appearance it resembles a crumpled leaf not more than a half inch across in any way, and is a striking contrast to the large fleshy tongues of the ducks. The latter slide in grooves in the lower mandible, are armed along the upper edges and base with numerous papillæ, which tend to hasten the food toward the gullet. The mergansers, with their narrow bills, must have a tongue to fit. It is of a lance shape, armed along the sides, top and base with strong barb-like projections admirably adapted for catching upon the scaly covering of their food.

Many of the insectivorous birds have tongues very similar, consisting of a stiff plate generally frayed or split at the tip into two or more equal or unequal portions. That of the warblers is narrow, fitting the bill, with a wider base which is quite forked and edged with backward directed points. The tip of the tongue is singly cleft.

That of the chickadee has the tip cleft into four points, forming, as it were, a little fork, and which looks to us as being admirably adapted for prying insects and their eggs from the bark and leaves of trees. The jays are provided with tongues quite like the chickadee. The seed eaters, such as the sparrow family, have a hard, sometimes grooved, tongue that is suitable for holding seeds to be shelled or hulled before being swallowed.

That the tongue of a bird (especially the tongue of the domestic fowl) is capable of distinguishing readily the numerous tastes or flavours of different seeds, is in itself a peculiarity. We would think that an organ of such formation could not be possessed with such delicate nerves; yet watch the old biddies picking over an assortment of grains. A kernel of doubtful quality will be taken up by the beak, touched with the point of the tongue, and if of proper flavour will be consigned to the crop. If not of the flavour that a fastidious hen requires, it is dropped.

In the foregoing kinds of tongues we have noticed some of the characters visible from the outside. Other interesting parts may be observed by dissection.

Some birds, in procuring their food, need to use their tongues in so doing. The woodpeckers, for instance, must insert the tongue into the burrows of wood and bark-eating and earth-dwelling insects, and for this purpose a special type of tongue is necessary. The tongue of the sapsuckers is only capable of extension for a short distance. Those of the pileated, hairy and golden-winged woodpeckers are capable of being extended fully the length of the head and bill beyond the tip of the bill. The hyoid bones of their tongues extend around the base of the skull, up over the top, where the bones are bundled together; then they come over the front of the skull, and may either enter into the opening of the right nostril or curve around the eye ball. These hyoid bones are surrounded with muscles for the extension and contraction of the tongue proper, which is armed at the point with backward sloping barbs, greatly assisting the birds in extracting grubs, caterpillars

and mature insects from their burrows. Their tongues are admirably suited for helping to capture their insect food, and thus they can seize living food that otherwise would be beyond their reach. The salivary glands of these birds are well developed, and the tongue is supplied with a sticky coating which also helps hold their food and assist in its extraction.

The tongue of the humming-bird is of the same structure as that of the aforesaid woodpecker; thus it is assisted in extracting minute insects from the nectaries of honey-bearing blossoms. The long spur of the nasturtiums is readily probed to its bottom by the far-reaching tongue of the humming-birds. In great contrast to the long hyoid tongues of the woodpeckers and humming birds are those of the birds that capture their insect-prey in the air. Thus the tongues of the swift, swallows, night-hawk and whip-poor-will are short and broad, with hyoid bones scarce extending to the base of the skull.

Personal study of the many forms of tongues found about a taxidermist's workshop will reveal many curious structures, and students will find there is much more to learn than can be given in a short article like this, which only aims to be an eye-opener to further study. Have you ever thought how the tongue can play a part in the gathering of nesting material? Watch a robin gathering dried grasses for a nest. How can she ever retain such a mouthful and still pick up more unless the tongue plays a part in holding some against the upper mandible as the lower is dropped to take in more material?

Yes! It is interesting to associate the study of the habits of birds with a study of the structure and form and uses of their tongues!

I popped the question to Marie,
Like any other beau;
She blushed and smiled and answered, "Oui,"
For she is French, you know.
"My dear," I asked her, bending low,
(I feared my cake had turned to dough)
"Whom do you mean by we?"
"O, U and I," she said.

—*Success Magazine.*

The chimney swallow can fly for a long time at the average speed of ninety miles an hour.

The common black swift has made two hundred and seventy-six miles in an hour.

An Acadian Spring.

Across some mirrored lake
As evening falls,
I hear the night birds give
Their vesper calls.

The tinkling bells of kine
Float down the vale
And lose their melody
Along the trail.

Forth from the old mill-race
There comes the roar
Of waters falling as
They fell of yore;

While far in yonder gorge
A restless stream
Makes music to the night
Wind's gentle dream.

Across the marshland drifts
A silvery screen
Of fog; the late moon casts
Her mystic sheen.

Upon Tawopskik's hill
The odorous Spring
And cool, dark Earth now move
The heart to sing.

As out of memory
Faint echoes rise
And quaint Acadian days
In dim disguise.

—*Inglis Morse, in the June Canadian Magazine.*

My Neighbour.

I have a new neighbour just over the way,
She was moving in on the first of May.
When she took in her household goods, I saw
There was nothing but rubbish and sticks and straw;
But when I made her a call just now
I found she had furnished her house somehow
All trim and tidy and nice and neat,
The prettiest cottage in all the street.
Of thistle-down silk was her carpet fine,
A thousand times better and softer than mine;
Her curtains, to shut out the heat and light,
Were woven of blossoms pink and white;
And the dainty roof of her tiny home
Was a broad green leaf like an emerald dome.
'Tis the cosiest nook that you ever did see,
Mrs. Yellowbird's house in the apple tree.

—*Youth's Companion.*

The Caspian is the freshest sea on the globe. It has only eleven pounds of salt to the ton of water; the English Channel has seventy-two and the Dead Sea one hundred and eighty-seven.

The Problem of Study.

Some time ago I heard a group of teachers discussing a recitation in arithmetic which they had seen in another system of schools. They said that the teacher had assigned the children four problems to solve, and that, when the recitation was called, she found within less than five minutes that each child had solved all of the problems. The remainder of the recitation period was given over to the consideration of other problems illustrating the same principle.

One of the teachers who had seen the recitation said, "The children, in my judgment, were not tested sufficiently upon the problems they had solved. It would have been better if some child had been sent to the blackboard to solve the first problem, another to solve the second, and so on until each one of the four problems assigned had been placed upon the blackboard. Then the teacher should have asked some pupil to explain the first problem, a different pupil the second, still another pupil the third, and another the fourth. Only in this way could she have really tested the children on the problems."

The form of recitation this teacher was describing is still in very general use. But the teacher of the class found in those five minutes that the children had actually solved the problems. She used the fifteen minutes of time remaining for other things.

The test in arithmetic is in the solution of problems. If an assignment is given and the children come with the problems unsolved, it indicates that the teaching which is now being tested through this assignment has not been well done, and that it must be done again. On the other hand, suppose that practically every member of the class has all of the problems solved, what does it indicate? That the teaching has been well done, and that the children, instead of being required to do again that which they have already done, should have new problems illustrating the same principle if we wish the principle rather than the problems to be fixed in memory.

Some one may say, "Suppose there is a child or two, who do not have all of the problems solved. What will you do with them?" Their failure indicates the place where individual help is needed. A few well-directed questions at the opening of the recitation may start them on the right road to self-

recovery. If this can not be done, then these children should be seen privately; they need personal attention.

Without doubt, more time is wasted in arithmetic than in any other subject in having children do again and again that which they have satisfactorily done. We think it is foolish for one to continue to practise that which has already become habitual, but we seem to be willing for this to be done, in lesser degree to be sure, in handling problems in arithmetic.

A large share of nearly every recitation in arithmetic can be saved for the solving of new problems, for aggressive drill, or for the turning of new soil, getting ready for the new principle which must be met to-morrow or next week. Progress will be more rapid, facts will be more firmly impressed, and principles more thoroughly taught, if the teacher saves this time for studying with the children. A part of nearly every recitation in arithmetic can be made a study-recitation where pupil and teacher work together on the common problem. Such a procedure will require a little more tact and resourcefulness on the part of the teacher, but the interest and results secured by it will amply repay for the extra effort.—*School News.*

If you're told to do a thing,
And mean to do it really;
Never let it be by halves;
Do it fully, freely.
Do not make a poor excuse,
Waiting, weak, unsteady;
All obedience worth the name
Is ever prompt and ready.

—*Phoebe Cary.*

Go to bed early—wake up with joy;
Go to bed late—cross girl or boy.
Go to bed early—ready for play;
Go to bed late—moping all day.
Go to bed early—no pains or ills;
Go to bed late—doctors and pills.

—*St. Nicholas.*

The little stars that wink and blink,
Must sometimes sleepy be, I think.

If pansies could wish,
I really should think
They'd turn into butterflies
As quick as a wink!

COLLEGE ANNIVERSARIES.

University of New Brunswick.

The University of New Brunswick has now a staff of ten professors, and an arrangement has been made to separate the chair of English from modern languages. Prof. Geoghegan, who has performed the duties of both, will in future take modern languages, and an appointment to the professorship of English literature will be made. Chancellor Jones, in his encœnial address, made a strong plea for the establishment of a chair of history, showing how important it is that the graduates of the university should be familiar with the details of their country's history. One important feature of the work of the university is the increasingly large number of teachers who are taking advantage of its courses in order to acquire a higher training.

Both the Douglas gold medal for English and the alumni medal for the best Latin essay were won by Miss Beatrice Welling, of Andover, Victoria County. The Lieut.-Governor's cash prize of \$50 was won by Norman S. Fraser.

Degrees were conferred as follows: LL. D. (honorary) on Dr. J. R. Inch, LL. D. (Mount Allison). M. A. (in course), Robert C. Colwell, B. A.; M. A. (*ad eundem*), Frank Baird, M. A. M. Sc. (in course), Allan Keay Grimmer, B. A. I. (Dalhousie); Harvey P. Dole, M. A. (Columbia). B. A. (*ad eundem*), John C. Belyea, B. A. (McGill); B. A., Clifford T. Clark, A. L. Dysart, Frank L. Orchard, Beatrice W. Welling, M. Lillian Elliott, Clarence T. Flanagan, Norman S. Fraser, Grace H. Fleming, Locksley McKnight, Maude K. Smith, Olive H. Stothart, W. Gordon Firth, Lillian L. Smith and A. Verna Brown. B. Sc., Allston T. Cushing, Charles H. Hoar and Leon L. Theriault.

Mount Allison University.

The convocation of Mt. Allison University was held on Tuesday, June 1st. Twenty-seven degrees were conferred, only two of which were honorary. These were the degree of D. D. given to Rev. Benjamin Chappell (B. A. '73) and Rev. Arthur C. Borden (B. A. '88), both of whom have had a long service in educational and missionary work in Japan. Dr. Chappell is still in Japan; Dr. Borden was present to receive his degree, and made a short address. The graduating class (B. A.) contained some people of prominence. Three received honour certificates in philosophy, two in mathematics and two in English. The valedictorian was Ivan C. Rand, of Moncton, N. B., who was also the winner of the alumni honours given to the student taking the highest standing during his course. He has been on the intercollegiate debating team for two years, and has been prominent in all college mat-

ters. He expects to enter upon the study of law. In the class there were four young ladies, two of whom were the twin daughters of Dr. Borden, of the Ladies' College. They expect to spend next year at Columbia, New York. Another member, C. Albert Oulton, has been awarded a mathematical scholarship of \$150 at Harvard, and will enter upon work there in the autumn.

Eight students were awarded certificates of having completed the course admitting them to the third year in applied science at McGill. Among these was W. Roy Smith, of St. John, who took his arts degree last year. Some of these will attend McGill at once; others will work outside for a year or two, and one or two will probably return to finish an arts course at Mt. Allison before proceeding to McGill. The record of those who have gone previously with similar certificates has been an admirable one. In the year just closing, Mr. Seymour J. Fisher, of Amherst, N. S., who spent two years at Mt. Allison as student and one as instructor, made an almost unique record. In his twelve subjects he was the first in ten, and in some of them was the only man who got a first class.

Certificates in theology were awarded for the first time to those who had completed the required conference course, but had not proceeded to the degree of B. D. In this group there were five, two of whom were among those completing their arts course. The remaining three were from Newfoundland. Dr. Sprague has had a successful first year in collegiate work. Prof. Miller, who had a temporary appointment to the chair of New Testament theology and apologetics, goes West to a college in Edmonton, Alberta.

This convocation had an added interest as an historical gathering, since it is the last which will be held in old Lingley Hall, so familiar to generations of students. Dr. Allison referred to the part it had played in the life of the students and of the community since it was erected in 1856. Hon. Joseph Howe, Sir Charles Tupper, William Elder, Senator Ellis and many other men of prominence in the public life of the country had spoken from its platform. In 1861 Sir Leonard Tilley made there what was probably the first speech in the Maritime Provinces, forecasting the larger confederation which took the place of the proposed maritime union. Its classic front will be missed from the crown of the hill, but Lingley must give way to the new Ladies' College, which has become a necessity. The latter building will be of stone and brick, and will be proceeded with during the summer. It will stand on the site of Lingley Hall, which would leave Mt. Allison without any large public assembly room. This deficiency is to be supplied by Mrs. Frederick Ryan and Charles Fawcett, daughter and son of the late Charles Fawcett, who propose to put up a hall in memory of their father, to accommodate from 1,000 to 1,200

people. Its site is not yet determined, but will probably be on the knoll where Charles F. Allison's house formerly stood.

The anniversary exercises were attended by a large number of enthusiastic former students, especially those of recent years. The class of '04 started a movement which will probably result in the endowment of an alumni chair of economics. The number of scholarships and prizes was largely increased. The graduating class of this year offers a gold medal for logic and psychology; the class of '99 gives a \$50 prize to the junior class; others are given by C. N. Haney ('97), of Vancouver and H. T. Paisley ('04) and Mrs. Paisley endows a bursary in memory of Rev. Dr. Paisley; four Wesley Smith bursaries of \$50 each are offered for competition to students at matriculation in September.

There will be a few changes in the professoriate and teaching staff. Rev. F. W. W. Des Barres ('89), who has been studying for two years in Oxford and Glasgow, will take up his studies at Mt. Allison in September. An assistant will also probably be appointed in connection with the chair of English. Miss Margaret Graham, of Toronto, who has taught for some years at the Ladies' College, goes abroad for a year's study in Germany. Miss Cawthorpe, of the Conservatory, will spend the next two years in Paris. J. S. Smiley ('07), of the Academy staff, has accepted an offer in a school in the Canadian West.

Seven post-graduates have been pursuing studies in various departments during the year. One of these was Arthur Motzer ('05), Rhodes scholar from Bermuda, and an honour graduate in physics of Christ Church, Oxford. He was taking courses in engineering preparatory to study at McGill.

W. M. T.

Acadia University.

The seventy-first anniversary of Acadia took place on the second day of June. Visitors were present in large numbers from various parts of these provinces and from the United States. On the Sunday morning preceding commencement day, Dr. Thomas Trotter, of Toledo, Ohio, who three years before resigned the presidency of the College after an administration marked by great financial advance, preached the baccalaureate sermon. The address on the evening of the same day, before the College Y. M. C. A., was delivered by Rev. A. A. Shaw ('92), of Winnipeg. Between baccalaureate Sunday and commencement day, the Boys' Academy and the Ladies' Seminary held their closing exercises. The attendance at the Academy during the year has been one hundred and five, making Principal Robinson's first year a good one. The enrolment at the Seminary has been two hundred and sixty-five. Thirty graduated from the Academy and thirty-five from the Seminary. The usual

address to the former was delivered by Rev. E. D. Webber ('81), pastor of the Baptist church at Wolfville; and to the latter by Rev. W. W. McMaster, of the Germain Street Baptist church, St. John.

The number of students at the College has been two hundred and one, the largest in the history of the institution. This makes the total attendance for the year at the three schools nearly six hundred. Twenty-one received the B. A. degree, eight the B. Sc. degree, and five the certificate in the partial engineering course. Eleven were added to the M. A. list. The honorary degree of LL. D. was conferred upon his honour the Lieutenant-Governor of Nova Scotia, whose presence enhanced the interest of the occasion. Other honorary degrees were conferred as follows: The degree of D. C. L. upon Lewis G. Hunt, M. D. ('68), of London, England, and upon Col. D. McLeod Vince, of Woodstock, N. B.; the degree of D. D. upon Rev. H. T. DeWolfe, principal of Acadia Seminary, and Rev. W. T. Stackhouse, for many years a leader in Baptist missions of Western Canada; and the degree of Litt. D. upon Rev. F. G. Harrington, of Japan.

At the alumni dinner, immediately following the graduating ceremonies of the College, entertaining and inspiring addresses were made by Governor Fraser, Judge Longley, Dr. Trotter, Prof. Tufts, Dr. Hunt, Rev. A. A. Shaw, E. D. King, Esq., and Rev. J. R. Wheelock. Mr. M. F. McCutcheon, of St. John, spoke on behalf of the graduating class.

Two classes held re-unions during these anniversaries, viz., the class of '68 and '92. Of the former, only four survive. Of the twenty-six composing the latter, about half the number were present at their memorable banquet.

Two vacancies on the College faculty have just occurred. The president, Dr. W. B. Hutchinson, after two years of service, has resigned; and Prof. Bates, of the English department, after one year. It is expected that appropriate appointments will be made to these positions during the summer vacation. No little satisfaction is felt by the friends of Acadia in that the Carnegie science hall, a comely and commodious structure, erected at a cost of upwards of \$30,000, is now almost finished, and will be dedicated at the beginning of the next college year. With these improved facilities, and the choice of suitable men to fill the vacancies just mentioned, the coming year may be looked forward to with assurance of still greater success.

Wolfville, N. S.

R. Y. E.

St. Joseph's College.

St. Joseph's College, Memramcook, closed a successful year, June 17th, under the presidency of Rev. L. Guertin, C. S. C. The following young men received the degree of B. A.: LeBaron J. LeBlanc, Dorchester, N. B.; Louis M. McDonald, St. John,

N. B.; William D. Ryan, St. John, N. B.; Francois J. Demerse, M. D., of Montreal, P. Q. The degree of Bachelor of Letters was conferred on Camille E. Gaudet, St. Joseph, N. B., and Master of Arts on Hector L. Landry, B. A., barrister, of Edmonton, Alberta. Eight persons received commercial diplomas.

St. Joseph's was attended by 215 students last year, 129 of whom were from New Brunswick, 40 from Quebec, 29 from the United States and Cuba, 9 from Nova Scotia, 4 from Prince Edward Island, 2 from British Columbia and 2 from East Indies.

A Butterfly's "Umbrella."

He was only a butterfly, one of those beautiful, large, bluish-black ones that we so often see about the garden, but he knew enough to get in out of the wet.

It was during one of the heavy showers that so frequently, in the hot days of midsummer, come suddenly upon us, driving everyone to the nearest cover. To escape the downpour which meant great injury, if not destruction, to so delicate a creature, he quickly flew to a nearby Balm of Gilead tree, where, alighting on the under side of a large leaf, he clung with wings closely drawn together and hanging straight downward, using the big leaf as an umbrella to shield him from the great drops falling all around. High and dry, here he remained until the shower had passed, and the blue sky and warm sun called him once again to his favorite haunts.—From "Nature and Science" in June St. Nicholas.

A Spelling Test.

Hypocrisy, metallic, criticism, tyranny, privilege, bicycle, decision, inaugural, liquefy, Appomattox, saliva, descent, chocolate, asparagus, twelfth, omelet, ninth, ninety, pleurisy, nutritive, obstacle, fallible, legibility, parasite, Cincinnati, fascinating, benefited, belligerent, collectible, stomach, vinegar, corpuscle, alcoholic, valleys, skein, parallel, memorize, silhouette, supersede, sieve, affidavit, bilious, deposit, definite, prejudice, deficit, Yosemite, artillery, sacrilegious, amateur, fiery.

Greenland is governed by the Greenland Commission at Copenhagen, Denmark. It was the first settled by a band of Norsemen under Erik the Red, who gave it its name, in 985. A bishopric was founded there in the twelfth century by the King of Norway, and about 1260 it was constituted a state of Norway. There then followed a blank of 200 years in Greenland's history, due to climatic disasters, but beginning with the Danish settlement of 1721, the country has belonged to Denmark.—Philadelphia Press.

P. E. Island Educational Convention.

The thirtieth annual convention of the Prince Edward Island teachers was held in Charlottetown, July 12-14. The convention is usually held in September, but this year it was decided to make a change. The president, Inspector Boulter, presided, and under his guidance the proceedings were harmonious and effective.

Dr. S. B. Sinclair, dean of the Macdonald College, Quebec, gave two interesting addresses. His clear and thoughtful talk on the Stages of Child Development gave his audience a fresh view of their duty and attitude toward the child, and how to make every phase of the child's life and every subject of the curriculum of greater educational value. His illustrated address on Forestry and Education was a strong plea for the teachers and school children to become more interested in trees and their protection and preservation.

Dr. G. U. Hay, in dealing with The Teacher's Opportunities, prefaced his address by references to many Island teachers who had won distinction in their own country and elsewhere.

Mr. S. A. Starratt, B. Sc., of Boston, made a bright, forcible address, punctured with many witty sallies and thrusts at educational methods, past and present. One statement in reference to the relative cost of education may be quoted here:

In 1879 the average cost per pupil in P. E. Island was \$4.60 and in Boston \$28. In 1907 the cost in this province was \$8.94 per pupil, \$10.40 in Nova Scotia, \$33.35 in Alberta, 15.67 in Canada, 14.16 in Great Britain, \$14.64 in the United States, \$42 in Boston, and \$51 in New York.

Kindly reference was made by Principal J. D. Seaman to the loss the Association had sustained in the recent death of Principal John McSwain, whose interest in the natural sciences, general scholarship and good judgment were always at the service of teachers.

The following are the officers for the coming year:

President—P. J. Bradley, Cardigan.

Vice-president for Kings—W. J. Fraser, Montague.

Vice-president for Queens—Mr. McKinnon, Canoe Cove.

Vice-president for Prince—Miss Pearl Hopgood, Malpeque.

Secretary-treasurer—Miss Cornfoot, Charlottetown.

Recording Secretary—David McLean, Searlton.

Executive—J. D. Seaman, R. H. Campbell, Jas. Landri-gan, Miss Scott, Inspector McCormac.

FOR FRIDAY AFTERNOONS.

A True Story.

Millie was a little girl who lived in the country. She was a busy, happy little maiden who was very fond of making clothes for her dolly. Her mother encouraged her in this in every way she could. One day she gave Millie a beautiful piece of white lace to trim dolly's party dress. There were two yards of it, and it was almost two inches wide.

As it was slightly soiled, her mother told her to wash it and put it on the line to dry, and when it was starched and ironed it would look as nice as new. She was proud as a queen as she did the washing, and had great plans made as to just how dolly would look in her new gown.

An hour later Millie went to the line to get her lace, when, lo and behold! it was gone. With tears in her eyes she rushed to mother to find out if she had taken it in, but "No" was her reply. She questioned little brother, but he knew nothing of it. She searched in every corner of the yard, looking under bushes, in the trees, and under the fence, but all of no avail. She sat down and made dolly a plain, simple dress, and she seemed as happy as ever. Quite often as Millie dressed her dollie she would say, "I 'spect the fairies needed the lace worse than you did, dolly, dear, so we'll try to be happy without it."

The days passed on and the summer was almost over. Millie and dolly had almost forgotten about the fairies and the lace. Suddenly, one bright sunny day, her older brother, Harry, came rushing in with face aglow, and shouted, "Millie, I've found your fairy and your lace."

Millie, all excitement, begged to know where the fairy lived, and Harry said, "Up in the old elm tree." Sure enough, the fairies were a pair of saucy bluejays. Their nest must have been almost finished when Millie hung her lace on the line. They thought what a nice nest that will make for our little babies, so they took it. How they ever managed to carry it around the house to the tree will always be a mystery to Millie.

Brother put up a large ladder and let Millie climb up and peep into the nest. What do you think she saw? Five fluffy little birds cuddled down with just a frill of white lace showing all around the nest. The worried mother and father bird flew around Millie's head, screaming and pecking at her, as if to say, "What are you doing here?" Millie simply said, "I want to see for myself and tell dolly who stole the lace, for she thinks the fairies did it.—Selected.

A Geography Device.

As much as possible, I try to teach geography objectively. I have found this plan very helpful. After studying the cities of a country, I give a pupil a city to illustrate. A certain corner of the blackboard, otherwise of no use, answers our purpose. At the top, in bold, clear letters, is written the city's name. Under this is pinned or pasted pictures or objects that will impress the city's chief characteristics on our minds. Every day for a time a new city is given, and there is considerable rivalry as to whose city shall be illustrated best.—*Popular Educator.*

Ten Little Smiles.⁷

One little smile ran off alone to play,
Gained the day o'er a pout it found on the way.
Two little smiles instead of one
Overtook a second pout—my, what fun!
Three little smiles said, "Come along with us,"
Meeting a wee frown in a needless fuss.
Four little smiles at a merry pace
Whisked off a baby frown from an anxious face.
Five little smiles—a very jolly mix!—
Overtook another pout; smiles now six.
Six little smiles (over half eleven)
Enticed away another frown; now the smiles are seven.
Seven little smiles—what a lucky fate!—
Met a tiny, woe-begone, little band of eight.
Eight little smiles all in a line
Went all round a pucker—see, the smiles are nine!
Nine smiles now in all—courageous little men—
Took a stray pout prisoner, and swelled the ranks to ten.
Isn't it amazing (yet it's really true)
What a single little smile all by itself can do?

—*The Sunbeam.*

Who Has Counted Them?

"How many claws has our old cat?"
Asked Eddie. "Who can tell me that?"
"O that," said Harry, "everyone knows:
As many as you have fingers and toes."
"Yeth," lisped Ethel, "she'th jutht got twenty;
Five on each foot and I think it'th plenty."
"Yes," said Bertie, "just five times four;
That makes twenty, no less, no more."
"Wrong," said Eddie, "that's easy seen;
Catch her and count 'em—she has eighteen!"
"Cats on each of their two hind paws
Have only four, and not five claws."

—*St. Nicholas.*

The Robin on the Lawn.

A flash of red through a sky of blue
The whirl of wings in the dawn and due
A field of green and a lover true,
The robin on the lawn.

A note of joy in the morning air
A low sweet song like a murmured prayer
The passion of love thrills merrily there,
The robin on the lawn.

In the twilight peace when the day is done
He woos his mate till his suit is won
'Tis the old, old story of Adam's son,
The robin on the lawn.

—*Boston Transcript.*

Set In Her Way.

Sweet Mary Jane sat fourteen days and wouldn't deign to rise,
 Although her folks tried every way to make her realize
 That it was quite unladylike to sit all day and night,
 And never change her attitude or rouse her appetite.
 They coaxed and teased and threatened her, and still she would not stand,
 And when they tried to raise her up she bit them on the hand.
 They didn't want to do her harm or call in the police,
 And yet they sorrowed at the thought of Mary Jane's decease.
 But Mary Jane knew what was best, she wiser was than men,
 She sat until she'd had her set, for Mary was a hen.

Kept After School.

"I'm sorry," said their teacher,
 "To keep you, Tom and Joe;
 I do not like to punish you,
 Because it grieves me so."
 But naughty Tommy whispered
 To naughty little Joe,
 "If she's so very sorry,
 Perhaps she'll let us go!" —Selected.

A Hint.

My desk is banked with wild flowers every day. I am very fond of them, and yet have been obliged to throw away beautiful bunches every day, as they grow in great profusion on the hill to the rear of my schoolhouse. Not long ago an old lady told me she had not seen a wild flower this year. The next day I had my smallest children carry her after school the pretty flowers they had gathered me during the day. We have found others who have seen no wild flowers this year, and have given several "flower showers" in our little town. Perhaps there is a suggestion here for other teachers who have more flowers than they know what to do with.

A few verses selected for the little ones to recite who cannot remember much at a time:

The woodpecker taps on the bark of a tree,
 "Little bug, little bug, come out and see me!"
 The little bug thinks, "No, you want to eat me!"
 And keeps very still 'neath the bark of the tree.

If I were the wind,
 I know what I'd do;
 I'd rattle the doors
 And the windows, too.
 I'd whistle and shout,
 And laugh and sing,
 And then, like a bird,
 I'd be off on the wing.

Have you ever felt when talking to your classes of wee folks; or telling them stories, that you would like to bring them, every one, right close to you? Then do it. Ask them all to come forward; then at your signal, have them cross feet, and sit right on the floor. You must also be seated, at one side of the group, in a small chair or on a stool. Try this plan, teachers, and I am sure your efforts in story telling, or nature work, will repay you as never before.

The plan works so nicely, too, in picture study. One picture can be seen by all at the same time, and there will be no lack of response either in words or looks. Caution—keep on good terms with the one who does your sweeping, and look out for draughts on cold days.—Selected.

Little Doris could not count beyond four. One day, when she was showing me five berries that she had picked, I asked, "How many have you, Doris?"

Her brows puckered a moment, then dimpling with smiles, she answered, "Wait till I eat one—then I'll tell you!"—*Woman's Home Companion for July.*

A bright little fellow was taken to a barber shop for the first time to have his hair cut, and as the barber was in a distant part of the shop for a few moments the small customer said in lowered tones to his father: "Papa, you must tell the man that I am not to be shaved."—*The Delinicator for July.*

The World's Longest Road.

An interview with F. von Gheel Gildemeester, chief engineer of the Cape Town to Cairo Railway syndicate, published in the *New York Times*, gives the following facts:

There is at present a stretch of about 2,500 miles to be completed in the railway; it lies between Khartum, in the British Egyptian Sudan, and Broken Hill, a town in Rhodesia. It is estimated that this remaining mileage will be completed within three years, and then the longest railroad in the world, covering in the neighbourhood of 6,400 miles, will be finished. The total cost will be very close to £200,000,000, or about \$1,000,000,000—a comparatively small amount when it is considered what a glorious thing it will be for Africa, one of the greatest and richest countries of the world. It will be possible for the traveller to journey from Berlin or Paris to Cape Town in ten or eleven days. Where now in travelling from Paris a business man is compelled to take a long sea trip, he will be able, after the completion of the road, to take train to Brindisi, Italy, thence by boat to Alexandria, Egypt, and a short journey to Cairo, where he will take the train that will land him in Cape Town, in the southern extreme of Africa, in eleven days.

Memory Gems for Character Building.

Life is an arrow. Therefore you must know
What mark to aim at, how to bend the bow.
Then draw it to the head, and let it go.

—Henry Van Dyke.

The world is not down on you, it is too busy.

Beveridge.

We shape ourselves the joy or fear
Of which the coming years are made,
And fill our future's atmosphere,
With sunshine or with shade.

—Whittier.

Life is a leaf of paper white
Whereon each one of us may write
His word or two, and then comes night.
Greatly begin! Though thou have time
But for a line, be that sublime—
Not failure, but low aim, is crime.—Lowell.

He doeth well who does his best;
He doeth well who strives;
Noblest efforts may sometimes fail,
Never noble lives.

Remember when the pomp of earthly glories fades that
one good deed

Unseen, unheard, unnoted by mankind,
Lives in the eternal register of heaven.—Robert Southey.

Every individual has a place in the world, and is im-
portant in some respect, whether he chooses to be so or
not.—Hawthorne.

When everything seems up a stump,
And fortune is against you,
Don't pine. Spruce up and show the world
You've got good timber in you.

—Selected.

Faithfulness in little things fits one for heroism when
the great trials come.—Louisa M. Alcott.

The heights by great men reached and kept,
Were not attained by sudden flight,
But they while their companions slept
Were toiling upward in the night.

—Longfellow.

And because right is right, to follow right
Were wisdom in the scorn of consequence.

—Tennyson.

Wind and rain fulfilling His word!
Tell me, was ever a legend heard
When the wind, commanded to blow, deferred?
Or the rain, that was bidden to fall, demurred?

—Mary N. Prescott.

Don't loosen your hold if the world wags wrong—
Hold tight, my boy, hold tight;
There are others who grope and stumble along—
Hold tight, my boy, hold tight;
If the others glide past you and get to the top,
Don't give up your efforts—don't grumble and stop;
Bend down to your task; don't weaken—don't flop—
Hold tight, my boy, hold tight.

—Milwaukee Sentinel.

CURRENT EVENTS.

The British Association for the Advancement of
Science will meet this month in Winnipeg, this
being its third meeting in Canada.

The growing scarcity of wood is strikingly shown
in the use of glass instead of wood for making
cigar boxes, because the glass is cheaper.

Great caves, larger than the far-famed caves of
Kentucky, and containing remains of an ancient
race, heretofore unknown to the archeologist, are
said to have been found in the northeast part of
Arizona.

The new French ministry which has been form-
ed, with M. Briand as premier, is committed to the
policy of putting an end to the war between capital
and labour, which has disturbed France for many
years.

The red, white and blue divisions of the British
fleet have been revived in this year's manœuvres,
so the old refrain, "Three cheers for the red, white
and blue," again has a meaning. There were three
hundred and fifty ships engaged in the movements,
the largest fleet ever seen; and as but eight of them
were over ten years old, it may be assumed that it
is also the strongest and most efficient fleet ever
assembled. The urgent call for more battle ships,
however, has not ceased. To protect the greatest
commerce of the world, the greatest fleet of the
world is needed.

Mohammed Ali, Shah of Persia, has been de-
throned, and the Crown Prince, Ahmed Nirza, pro-
claimed ruler by the National Assembly. The new
Shah is but twelve years old, and a regent has been
appointed.

The referendum in the colony of Natal having
resulted in favour of federation, South Africa will
become a united community, like Canada and
Australia. Of the four self-governing nations in
the British Dominions beyond the Sea, the Dominion
of Canada, the Commonwealth of Australia, the
Dominion of New Zealand and the South African
Union, two, the first and the last, will have provision
for dual speech in their courts and legislatures, the
Dutch language having the same recognition in
South Africa as the French has with us.

To the usual reports of tyranny and insurrection
in the smaller states of Central and South America,
there is added this month news of the breaking off
of friendly relations between the Argentine Re-
public and Bolivia. The long standing boundary
dispute between Bolivia and Peru had been referred
to the president of the Argentine Republic for
arbitration. Bolivia refused to accept the award,
and the Argentine government at once dismissed
the Bolivian minister and recalled their own repre-
sentative in Bolivia.

The joint occupation of Crete by the forces of
Britain, France, Russia and Italy was undertaken
for a limited time, and must now give place to some

new arrangement. The Turks hold the nominal sovereignty of the island; but the Cretans want annexation to Greece, and will not submit to Turkish control.

Military assistance has been called in to preserve the peace at the coal mines in Cape Breton, where members of an international miners' union are on strike and are trying to prevent the miners who belong to a Canadian union from carrying on the work. Canadian labour unions in other places are in sympathy with the Canadian workmen, while those who belong to other unions, having their headquarters in the United States, are giving moral support to the international union.

It is pleasant to turn from wars and tumults to note the display of good feeling at the Champlain tercentenary celebration at Lake Champlain. There three regiments of United States troops and two Canadian regiments marched in review before President Taft; and the British ambassador, the Premier of Quebec, and the Postmaster-general of Canada were among the speakers. The Caughnawaga Indians took a part in the celebration; and, while the pageant was not to be compared with that at Quebec a year ago, it was sufficiently impressive.

At the Dominion Day celebration in London this year, Earl Grey prophesied that nothing could prevent Canada becoming the most populous, wealthy, and, if she lived the right life, the most influential portion of the Empire; and Englishmen and Canadians joined in the applause when he added, "What Canadian is there who shrinks from such a destiny as that?"

The bridge to carry the C. P. R. track across a deep ravine, between Lethbridge and McLeod, Alberta, which is now nearly completed, is said to be the largest steel structure in the world. It is over a mile long, and at one point is 312 feet high. No less than twelve thousand tons of steel have been used in its construction.

A wireless telegraph system is arranged for the improvement of communication along the St. Lawrence, and some of the stations are already at work. If present plans can be carried into effect, the scattered posts in the extreme north of Canada will be connected with civilization by means of the wireless telegraph.

Over one hundred and fifty thousand persons are believed to have come into Canada from the United States in the year ending with the 31st of March. Some of these were Europeans coming by way of the United States, and some were returning Canadians, but many, and probably a very large proportion of the immigrants, were born in the United States.

This dominion is not the only country in America which is growing rapidly by immigration. The number of immigrants to enter Brazil last year was

nearly a hundred thousand, and the other large countries of South America offer homes to European immigrants, and are, perhaps, more ready than we are to welcome Asiatics.

As a result of an expedition recently sent out by the government of Southern Nigeria, five thousand square miles of territory hitherto unknown and unadministered has been brought under effective control. The natives were mostly cannibals, and had never before seen a white man.

The work of digging the canal across the peninsula of Cape Cod is to be completed in three years. It will be about eight miles long, and will shorten considerably the distance between New York and New England ports.

A takin has been placed on exhibition in London. Takins are heavily built and powerful animals, and, next to the okapi, the rarest ruminants known. They are natives of the highlands of Thibet. Very few white sportsmen have ever seen them, and the one which has now reached England is the first that ever reached Europe alive.

A scientist who has made a special study of snakes believes that they have a sixth sense which resides in the forked tongue, by means of which it can find its mate in the woods or can follow its prey.

A rudder which has given remarkable results on motor boats is composed of two hinged halves opening like a book. When closed, it is an ordinary rudder. When the wings are open, the water from the screw propeller strikes the flat surface, which acts so powerfully as a brake that the boat can be stopped with the engine still going full speed ahead.

A small bicycle for each foot, propelled by the weight of the wearer in the ordinary motion of walking, is a brief description of a new machine now said to be in use in the Swedish army. It is called the tachypod.

A flying machine has crossed the channel from France to England, winning the prize of one thousand pounds which was offered by the *London Daily Mail* to the first who should accomplish the feat. Louis Bleriot, a Frenchman, was the successful man, and his average speed was more than forty-five miles an hour. The little bird-like machine he used is only twelve feet across the wings, and weighs but four hundred pounds.

In celebrating the sixty-fifth anniversary of the founding of the W. J. Gage Company, Toronto, in June, occasion was taken of presenting Mr. W. J. Gage, who has been head of the firm for the past thirty-five years, with a beautifully illustrated address. Accompanying this was a special copy of the handsome booklet which the firm has issued to mark the completion of so many successful years in business.

The Review's Question Box.

F. A. H.—Kindly answer through the REVIEW or otherwise the following questions:

(1) As a liquid is attracted by a body (a small glass tube, for example), which is submerged in the former, or as the molecules of a liquid are attracted by the molecules of a body, is not the force of capillary attraction, therefore, adhesion, or a particular kind of adhesion?

(2) Since one planet of the universe or body is attracted by another, or since the molecules of one planet or body are attracted by the molecules of another, is not, then, the force of gravitation adhesion (or cohesion)?

(3) Why does the needle of a compass point towards the North Pole? Does the needle always point directly north? Is magnetism a force somewhat resembling gravity, differing in the respect that the latter acts from the centre of bodies while the locus of the former is in the north?

(1) Capillary attraction is due to molecular attraction, which is also the cause of the adhesion or cohesion of bodies. One characteristic of molecular forces is that they only have a measurable value at exceedingly small distances. It is upon this peculiarity that capillary attraction depends; for it follows that while molecules in the interior of a liquid are attracted on all sides by other molecules of the same liquid, molecules at or very near the surface are only attracted in some directions by molecules like themselves; in other directions they are attracted by molecules of glass, or of air, or whatever else the liquid is in contact with. Hence there is a very thin layer bounding any liquid on all sides that is in a different condition from the rest of the liquid, or, otherwise stated, the molecular energy per unit mass of the surface layer or film is different from that of the rest of the liquid. Let p be the energy per unit mass of the surface film and q that of the remaining liquid. Then it may be shown mathematically that if p is greater than q , the surface film will tend to contract to the smallest possible dimensions; while if q is greater than p , the surface film will tend to expand as much as possible. For example, when a water surface is in contact with oil, p of the water film is greater than q ; hence the surface film shrinks and the water gathers into drops. The same is true of mercury in contact with glass. But when water is in contact with a *clean* glass surface, p of the water surface film in contact with the glass is less than q ; hence the water film tends to extend indefinitely, that is, the water spreads over or "wets"

the glass; and similar relations hold for any other surface which water wets.

In short, then, whenever two liquids, or a gas and a liquid are in contact with a solid, or with each other, molecular attractions produce a surface film at the bounding surfaces, which tends to contract or expand, as the case may be. This tendency is called surface-tension; and it is upon the balancing of different surface tensions that the rise or fall of liquids in small tubes (capillarity) depends.

The *apparent* attraction or repulsion (according to conditions) between light floating bodies is also due to surface-tension.

(2) No. For it may be shown that molecular forces are only perceptible at distances too small to be directly measured, while gravitation acts at all distances. If gravitation were simply molecular attraction, then the force holding the two halves of the earth together would be simply the cohesion or tenacity of the rocks and other substances forming the earth's crust. Now the gravitational attraction between the two halves of the earth's sphere may be calculated approximately, and it is found to be many thousand times greater than the tenacity of any rock in existence.

(3) Because, for some reason not yet completely known, the earth itself is a magnet. The compass needle seldom points directly north. The angle between the direction in which it does point and the line running directly north (that is, the angle between the magnetic and the geographic meridian) varies from place to place, and also varies at the same place from time to time. In the Maritime Provinces the needle points some degrees (varying a little from place to place) west of north.

Dalhousie College, Halifax.

E. M.

A college professor who prefers the word *gotten* to *got* admits that for telegraphic purposes *got* has some advantages. He wired from the city to his suburban home: "Have gotten tickets for theatre to-night; meet me there." When his wife and daughter met him with seven invited friends it made a party of just the size to use the number of tickets mentioned in the *ten-word* message which the operator had delivered.

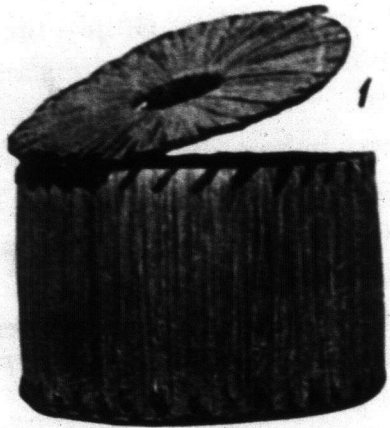
Be aware, therefore, that every man is worth just so much as the things are worth about which he busies himself.—*Marcus Antonius*.

MANUAL TRAINING DEPARTMENT.**Raffia Work—An Easy Basket.**

By T. B. KIDNER.

A description was given recently in these pages of a simple exercise for beginners in raffia work, namely, a napkin ring. The method of construction there suggested, consisting in winding raffia over cardboard forms, may be used for a variety of articles. A typical one is shown in our illustration, Fig. 1, a small circular box with a hinged lid or cover. The exercise presents few difficulties, and has been satisfactorily carried out by pupils of the lower grades.

A suitable size is four inches in diameter and two and a half in depth. Before commencing the work, the raffia must be prepared in the usual way by



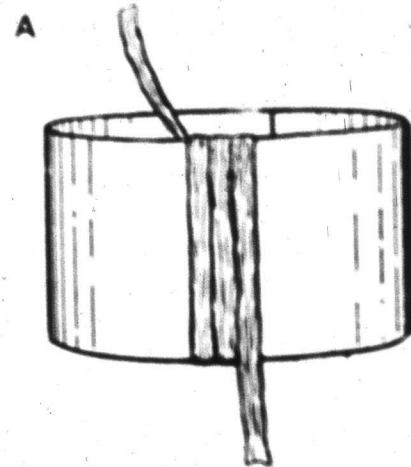
soaking in water for half an hour or so, after which it should be allowed to drain for a short time to get rid of the superfluous moisture.

Next, a strip of cardboard should be cut out, thirteen inches long and two and a half wide. Almost any kind of cardboard will do, as the whole of it is covered by the raffia. Millinery and dry goods boxes, to be found in plenty in every household, will generally provide material for this work without any expense for cardboard. The strip of cardboard is then bent into a ring, and the ends glued or sewn together, being overlapped about half an inch for the purpose. Moistening the outside of the ring with a damp sponge will assist in forming an even curve. The ring being completed, is ready to be wound with raffia in the manner shown in Fig. A. The end of the strand shown protruding from the inside of the ring is left long enough to tie to the last strand when the covering is completed.

The raffia must be wound fairly tight, each turn just touching the previous one without overlapping.

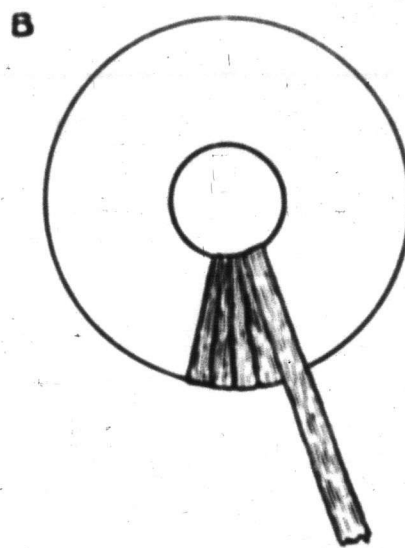
As the raffia will shrink in width in drying, it is best to wind a second layer over the first, the second being wound to cover the joints of the first layer.

The top and bottom of the box are formed as shown in Fig. B. Two rings of cardboard, of four inches diameter, are cut out, and holes one inch in diameter cut in their centres. Each ring is then covered with raffia, as shown, care being taken to



keep each turn on a radial line. The hole in the centre of the cover is filled with a simple "spider web" weave in raffia of some contrasting colour. As the bottom of the box is usually lined with a piece of card, the hole in it need not be woven up.

The bottom is attached to the ring or body by simple oversewing with coloured raffia or wool.



This stitch serves also as a neat finish for the upper edges of the body and the edge of the cover. (See half-tone illustration). The cover is hinged to the body by a few stitches, oversewn and overcast, of coloured raffia.

Various materials will serve for lining the box, varying from coloured paper to satin or silk, as may be convenient.

**MOUNT
ALLISON
LADIES'
COLLEGE**

Sackville, N. B.

**56th Year
Commencing
September 9**

Massey-Treble School of Household Science—

Normal Course Certificate from Mount Allison accepted as qualification for teaching household Science in New Brunswick Schools.

Conservatory of Music

With Faculty of Ten Members, and equipped with Pipe Organs and over 50 Pianos.

Department of Literature

Course leading to M. L. A. Degree. Scholarships for worthy students.

Department of Oratory

Affiliated with Emerson College of Oratory, Boston. Graduates from this department at Mount Allison, may enter the Senior year at Emerson.

Owen's Museum of Fine Arts

In charge of John Hammond, R. C. A., and equipped with Pictures, Casts, etc., to the value of \$75,000. Courses in Designing, Etching, Wood Carving and Leather Tooling have been arranged.

WRITE FOR CALENDAR

REV. B. C. BORDEN, D. D., Principal

**MOUNT ALLISON ACADEMY
SACKVILLE, N. B.**

First Term of the year 1909-10 will open Sept. 9th.

General, Special and Matriculation Courses leading to Colleges of Arts, Engineering, Medicine, etc., are provided. Additional rooms have been prepared for the accommodation of the increasing numbers seeking the advantages of this well known educational institution.

Large Staff Charges Moderate

Write for Free Calendar giving full information

Mount Allison Commercial College

WILL OPEN ON SAME DATE. Two courses are open to intending students—the Book-Keeping Course and the Course in Shorthand and Typewriting. Diplomas are granted to those completing either course.

**WRITE FOR
FREE CALENDAR**

J. M. PALMER, M. A., Principal

Programme of Charlotte County Teachers' Institute to be held in Milltown Sept. 23rd and 24th, 1909.

FIRST SESSION—10 a. m. Enrolment, Routine, President's Address, Chief Supt. W. S. Carter will also Address the Institute.

SECOND SESSION—2 p. m. Paper: History, Principal Atkinson of Milltown. Drawing, Miss Rena Gleason.

THIRD SESSION—8 p. m. Public Meeting, St. Patrick's Hall. Graham's Orchestra will be in attendance. Addresses by Chief Supt. of Education, Inspector Wm. McLean and others.

FOURTH SESSION—Friday 9 a. m. Paper: Nature Study and Agriculture, James Vroom, M. A., Secretary of St. Stephen School Board. Composition, Discussion. Best Books for Boys and Girls, Miss Mary Graham, Milltown.

FIFTH SESSION—2 p. m. Paper: Tuberculosis etc., Dr. Vincent Sullivan, Election of Officers, Routine.

The usual travelling arrangements will be made.

Mrs. W. J. Graham, Pres. F. O. Sullivan Secy., Milltown, N. B. St. Stephen, N. B.

The York and Sunbury Counties Institute Will Meet in the Normal School Building, Fredericton, on Thursday and Friday, the 17th and 18th of September, 1909.

PROGRAMME

RURAL SCHOOLS OF ENGLAND—Dr. G. U. Hay.
DISCIPLINE—Mr. James Burns, Principal of the Gibson School.

WRITING—Inspector Hanson.

PHYSICAL CULTURE—Miss Lynds, N. S.

GRAMMAR—Mr. James Hughes, Prin. Regent St. School.

Addresses by the President, the Chief Superintendent of Education, Rev. Hunter Boyd, and others.

A. S. McFarlane, M. A. Ella L. Thorne, President. Sec.-Treas.

SCHOOL AND COLLEGE.

Mr. F. C. Squires, principal of the consolidated school, Florenceville, N. B., has resigned to pursue his law studies at Harvard for the coming year. Mr. Rush and Miss E. Smith have also given up their positions on the staff of the school.

Principal Woods, of the Grammar school, St. Andrews, and Miss Osborne, principal of the intermediate department of that school, have resigned. Mr. Woods is succeeded by Mr. W. H. Morrow, of the Riverside consolidated school, and Miss Osborne by Mr. W. B. O'Regan, B. A., of Sussex.

Hon. A. R. McClelan addressed the graduating class of the Riverside, N. B., consolidated school at the closing, June 30th.

The exhibit of the manual training school, St. John, has attracted considerable attention, and is very creditable to the pupils and their capable principal, Mr. H. V. Hayes.

The Normal Teachers' Institute for the six eastern counties of Nova Scotia will take place at Sydney this year, during the week immediately preceding the Christmas holidays.

The Manual Training school of Halifax, N. S., so efficiently conducted by Principal Chas. W. Parker, had an exhibit at the closing during the last week of June, which was attended by a large number of visitors who showed their interest in and appreciation of the work of the pupils.

Principal H. G. Perry, of the Hampton, N. B., consolidated school, has retired, to take a course at Columbia College, N. Y., and is succeeded by Principal J. B. DeLong, B. A., recently of the Milltown school. The other members of the Hampton school staff are Miss Muriel DeMill, Miss Mary Isabel Page, Miss Bessie P. Howard and Miss Ella Seely.

At the 155th anniversary of Columbia College, New York City, Miss Mary Knowlton, of St. John, N. B., was awarded a diploma and the M. A. degree.

The Provincial Normal School of New Brunswick closed May 28th with one of the largest lists of graduates in its history. The class to assemble next month promises to be even larger than this year's class.

Mr. C. N. Gregg, B. A. (Mt. Allison, '08) has been appointed head master of Acadia Villa school at Hortonville, N. S., for the ensuing year.

The degree of Master of Science has been conferred on Mr. J. Douglas Trueman, of St. John, N. B., after a course of five years at the Massachusetts Institute of Technology.

Miss Louise Perkins has been appointed principal of the superior school, Norton, N. B., in succession to Mr. A. C. M. Lawson, resigned. Miss Louise Scovil and Miss Lena Heine are the teachers of the intermediate and primary departments respectively.

The closing exercises at the Edgehill School, Windsor, N. S., took place June 15th. Bishop Worrell, of Nova Scotia, gave an encouraging address, and the coveted prize of a gold star was presented to Miss Dorothy Brown, Ottawa, as leader of the school.

Previous to the closing of the N. S. Normal School, Truro, Principal Soloan, members of the staff and students paid a visit to the collieries of Stellarton and inspected the steel works of New Glasgow, where they were shown the various processes of the coal and iron industries—a valuable object lesson to the students after their school course was finished.

Miss Annie Whittaker and Miss Jessie Lawson, of the St. John, N. B., school staff, will spend their holidays in England attending special lectures at Oxford University.

McGill University graduated this year more students from Ontario, more from the Maritime Provinces, and as many from beyond Canada as from the province of Quebec, which is its home. McGill is a national institution of learning.

W. K. Wortman, son of Professor Wortman, of Wolfville, and Cyril MacDonald, of St. John, won the Nova Scotia and New Brunswick prizes respectively of the Standard of Empire contest for a free trip, extending from July 16th to August 19th, to England, Wales, Ireland and Scotland. During their travels they will be entertained at luncheon by Lord Roberts at his home in England.

Principal H. H. Blois, of the Morris street school, Halifax, has resigned his position.

Miss Alice Haverstock, of the Compton Avenue school, Halifax, has resigned. She has been teaching in North Sydney, C. B., during the past year.

Mr. Kelsey C. Denton, A. B., recently of the New Glasgow high school, has accepted the principalship of a school in Montreal.

Principal Angus McLeod, of Canso, N. S., will take charge of the Shelburne, N. S., school the coming year.

Miss Winnie Fairweather will be principal of the Lower Canard, N. S., school for the coming school year.

Mr. Reverdy Steeves, recently of the high school, St. John, has been appointed principal of the Aberdeen school of that city in succession to Mr. Wm. M. McLean, appointed inspector. Mr. Grover Martin, recently of the St. George, N. B., superior school, has taken Mr. Steeves' place on the high school staff.

Miss Pearl Currier, of Upper Gagetown, N. B., has been appointed assistant in manual training school, St. John, N. B., of which Mr. H. V. Hayes is principal.

Mr. Martin G. Fox, recently principal of the Apohaqui, N. B., schools, has resigned.

Mr. Laurie L. Burgess, of Woodville, N. S., who re-

cently took the Ph. D. at Harvard University, has been appointed instructor in chemistry at the University of Illinois.

Mr. L. D. Jones and staff of the Dalhousie, N. B., superior school, were complimented on closing day (June 30th) for the excellent work they did during the past year.

Mr. T. E. Colpitts, B. A., principal of the Alma, N. B., superior school, was recently presented with an address and a silver loving-cup by his old-time pupils. Mr. Colpitts has been a teacher for thirty years, and it is pleasant to note the appreciation of the men and women who were his former pupils.

A report that Mr. Colin W. Roscoe, inspector of schools for Kings and Hants Counties, N. S., proves to be unfounded. Although Mr. Roscoe has been in poor health for some time, the REVIEW unites with his many friends in hoping that he may be spared to continue his useful work for years to come.

Rev. Dr. Boulden, president of King's College, Windsor, N. S., has returned from England with his health somewhat improved.

Principal Barteaux, of Truro, N. S. Academy, is taking a course at the Harvard Summer School at Cambridge.

Miss Jean A. Hamilton, principal of the Truro domestic science school, has resigned her position, and will retire from the teaching profession, of which she has been a most capable and efficient member. Her future sphere of action will, we understand, be in a much smaller school than any in which she has heretofore been employed.—*Truro News*.

Among the Canadians who received degrees at Yale University this year were: W. B. Barss (B. S., Acadia, '07); E. C. Weyman (B. A., U. N. B., '02); J. W. Hill (B. A., U. N. B., '05); N. S. Fineberg (B. A., McGill, '08). Mr. Hill has been appointed assistant in chemistry at Harvard.

McGill University held its convocation this year at MacDonald College, the first time in its eighty years' existence that a convocation was held outside the limits of Montreal. The degree of Doctor of Laws was conferred on Hon. James Wilson, Secretary of Agriculture, and Gifford Pinchot, Commissioner of Forestry, Washington, D. C.; on Dr. James Earl Russell, Dean of the Teachers' College, Columbia University, New York; and on Dr. Duncan McEachran and Principal Robertson.

Mr. W. T. Denham, B. A., late of the Dorchester, N. B., superior school, and R. C. McCully, B. A., of Bathurst, have been appointed on the staff of the Mt. Allison Academy. Mr. McCully is an Arts graduate of Mount Allison University, class of 1909. His course at the university was very successful, and at its close he was awarded honours. Mr. Denham is a graduate of Acadia College, Wolfville, at which institution he made an excellent record.

Mr. R. F. Morton, B. A., of Digby Academy, has taken charge of the Queens County Academy, Liverpool, N. S.

Mr. A. D. McInnis, recently of Round Hill, Annapolis County, has accepted the principalship of the Mahone Bay, Lunenburg County, schools.

Miss Gertrude Oxley, M. A., has been appointed principal of the Maitland, N. S., schools.

CANADIAN PACIFIC

EXCURSION RATES

SEATTLE	VICTORIA
Alaska Yukon Pacific Expedition - -	Dominion Educational Institute
June To	Month of
October, 1909	July, 1909

CHANCE TO VISIT BOTH PLACES
AT ONE RATE
About \$100.00 Round Trip

W. B. HOWARD, D.P.R. C.P.R. ST. JOHN, N. B.

THE ASSOCIATED BOARD of the R.A.M. and the R.C.M. for Local Examination in Music

Patron—HIS MAJESTY THE KING
President—H.R.H. THE PRINCE OF WALES, K.G.

In consequence of the termination by the Governors of McGill University, Montreal, of the Agreement between the Board and the University for holding joint Local Examinations in Music in the Dominion of Canada, the Associated Board will conduct its own examinations in 1910 and all subsequent years, and the Secretary of the Board will visit Canada at an early date to make all necessary arrangements.

Syllabus for 1910 will be ready for issue to applicants in August next. Meanwhile, all enquiries should be addressed to—MR. JAMES MUIR, Secretary, 15, Bedford Square, London, England.

MAPS, GLOBES, BLACKBOARDS, SCHOOL DESKS

E. N. MOYER CO., LIMITED.
TORONTO, ONT.

NETHERWOOD

THE ROTHESAY SCHOOL
FOR GIRLS

Reopens for its Fifteenth Year
on TUESDAY, the Fourteenth
of September

60 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms for Canada, \$2.75 a year, postage prepaid. Sold by all newsdealers.

MUNN & Co. 361 Broadway, New York
Branch Office, 25 F St., Washington, D. C.

FIRE INSURANCE.

Western Assurance Company of Toronto. London Assurance Corporation of London, Eng
Incorporated 1851 Established 1720
Capital paid up \$2,500,000.00 Capital \$4,000,000.00

Insure with these strong, reliable Companies. Represented by
R. W. W. FRINK, - 96 Prince Wm. Street, - ST. JOHN, N. B.

Agencies throughout the Maritime Provinces.

Professor Vroom, who is now in England, will return to his duties in King's College, Windsor, N. S. It was expected that he would exchange work with the Sub-warden of St. Augustine's College, Canterbury, for a year; but the appointment of a new Warden of St. Augustine's has made it impossible for the Sub-warden to get leave of absence.

Mr. C. J. Mersereau, M.A., recently principal of the Horton Academy of Wolfville, who has spent the past year at Harvard, has been selected as principal of the Chatham, N. B., grammar school, to succeed Mr. R. D. Hanson, B.A., recently appointed inspector of schools for York County.

Miss Ellen Rogers, principal of the Girls' school, New Westminster, B. C., on her retirement recently was presented with an address and silver service in appreciation of her excellent work in that city. Miss Rogers is a native of St. Andrews, N. B., and there are many in Charlotte County who gratefully remember the stimulating character of the training received from her.

More than 170 students are in attendance at the Summer Rural Science School at Truro, N. S., and over 100 at the Summer School of Science for the Atlantic Provinces now meeting at Charlottetown, P. E. I.

Judge Longley, in addressing the teachers of the Normal School, Truro, recently said: "Teachers should form a union, and, when any board of trustees or school commissioners did anything to offend the dignity of the profession, that district should be left without an applicant. Teachers should club together and go without a school any year, for the sake of ultimate good to the profession."

Following their refusal to re-apply for their positions in the Sydney, C. B., schools, those held by Supervisor and Principal C. L. Moore, Vice-principal F. I. Stewart, and Miss J. Wallace Mortimer, principal of the Ashby school, became vacant. Mr. G. W. Mackenzie, of Truro Academy, is named as successor to Supervisor Moore, and Mr. J. Logan Trask, Yarmouth, is to fill Mr. Stewart's place. Miss Mortimer has been appointed to a position on the Richmond school, Halifax.

Miss Josie Howe, grand-daughter of the Hon. Joseph Howe, for some years a teacher in the School for the Blind, Halifax, N. S., died at Calgary, July 26th, of consumption.

Mr. Chester B. Martin, A. M., St. John, N. B., graduate of Oxford, and now of the Archives Department, Ottawa, has been appointed to the chair of history in the university of Manitoba.

RECENT BOOKS.

A new book on nature study, the major part of which is written by Dr. John Brittain, of the Macdonald College, Quebec, has just been published, entitled *Elementary Agriculture and Nature Study*. An introduction is contributed by Dr. J. W. Robertson, and there are supplementary articles on Fruit Raising, by Martin Burrell, M. P.; on Irrigation, by H. W. E. Canavan, C. E.; and on the Physics of Some Common Tools, by Carleton J. Lynde, Ph. D., of the Macdonald College. The book has been prescribed for use in the schools in British Columbia, but it may serve as a very useful work for foundation study in agriculture elsewhere. The analysis of subjects, with experiments and suggestions, in the outline lessons by Dr. Brittain are admirably suited for the schoolroom, and teachers will welcome this latest work from him. An eastern edition of this book is being prepared dealing with fruit culture and agriculture of the Maritime Provinces. (Messrs. W. J. Gage & Company, Toronto).

Manley's *English Prose*, a companion book to that excellent anthology, Manley's "English Poetry," has just been published. It is intended for a general survey of English prose literature from the Anglo-Saxon chronicle to the present time, and its selections are so well chosen that it presents a very excellent compendium of material for the student in special courses, as well as for the general reader who would be informed of the content of general English literature. The selections are not scrappy, but made up in generous portions from the authors quoted, which, of course, requires that many writers be omitted whom the reader might expect to find included in the volume. The book is provided with an index of authors, titles and sub-titles. (Cloth, pages xix+544, mailing price \$1.70. Ginn & Company, Boston).

A pretty little book and daintily illustrated is the *Children's Calendar* (price 3s, postage 3d.), providing a seasonal series of songs, games and recitations for every month of the year, except August. Each month has an original song with music specially composed, a game based on the song, a recitation and appropriate occupations, with outlines for nature study lessons, etc., and seasonal quotations from the poets. The book is intended to aid teachers in preparing suitable nature lessons for young children. (Geo. Philip & Son, 32 Fleet Street, London).

Philips' *Primary Atlas of the British Empire* (price 1s.) has been specially prepared to accompany the series of Imperial text-books now being used under the direction of the League of the Empire. For each of the great natural divisions of the Empire maps are given illustrating summer and winter climatic conditions, regional vegetation, distribution of population, general physical and political features; sea and ocean charts showing ocean highways and routes of travel; and a set of historical maps illustrating the expansion of the British Empire. (Geo. Philip & Son, 32 Fleet Street, London).

To develop the faculties of students rather than to accumulate facts is the purpose of the wise teacher. *An Elementary Course in Practical Science* (Parts I and II, price 6d. each) aims to do this by providing a series of exercises in practical work for pupils. Part I deals with length, area, volume, weight and density; Part II with mensuration, density and specific gravity, atmospheric pressure and heat. (Geo. Philip & Son, 32 Fleet Street, London).

Hicks's *Champion Spelling Book* was prepared in direct response to the cry of business men in general, "The boys sent to us from the public schools do not know how to spell!" It embodies the method of teaching spelling which after two years' use enabled the pupils of the Cleveland schools to win the victory in the National Education Association spelling contests of 1908. It covers six school years, from the third to the eighth inclusive, and contains about 6,000 words in all. Of these, 1,800 are selected for intensive study, two being made prominent in each lesson. The subordinate words are arranged in helpful groupings. Systematic reviews, and frequent oral and written spelling contests, are provided for throughout. (Cloth, pages 238, price 25 cents. The American Book Company, New York; Morang Educational Company, Toronto).

In Guerber's *Easy French Prose Composition* the principle of constant repetition is applied throughout the exercises, which give ample practice in a steadily enlarging vocabulary. The material used is simple and familiar. (Cloth, pages 91, price 25 cents. American Book Company, New York; Morang Educational Co., Toronto).

Abridgments of J. Fenimore Cooper's *Last of the Mohicans* and *Adventures of Pathfinder* have been published in form suitable for pupils. All lengthy descriptions, tedious conversations and other unnecessary details have been carefully omitted. Cooper's own words and the atmosphere of the original story have been retained wherever possible. (Cloth, price 35 cents each. The American Book Company, New York; Morang Educational Company, Toronto).

OFFICIAL NOTICES.

Reg. 20, Section 2, has been amended to read as follows:

2. *Vacations.*—(a) There shall be in all schools, except as hereinafter provided, a summer vacation of eight weeks, beginning on the first day of July, and a winter vacation of two weeks, beginning on the Saturday preceding the week in which Christmas falls.

(b) When the last day of the summer vacation falls upon Thursday or Friday, the following Monday shall be the first teaching day of the next term.

(c) On the application of the Board of Trustees of any district in which special conditions exist, the inspector may permit a part or the whole of the summer vacation to be taken at another time. In such cases the inspector

HYLOPLATE BLACKBOARDS—Have no equal, being light to handle, easy to put up and unbreakable. They come in slabs not over 12 ft. long and 3 ft., 3½ ft. or 4 ft. wide. We guarantee them to give satisfaction. Special price on application.

JOHNSTON'S MAPS are the best. Write us for special price of what you want.

NEW CHART BIRDS OF CANADA.—Over 80 birds in colors. The finest chart ever published. Size 30 x 42 inches. Sent prepaid to any address on receipt of \$3.00.

THE GEO. M. HENDRY CO., LIMITED,

SUCCESSORS TO

The Steinberger Hendry Co., The Dominion School Supply Co., and Western School Supply Co.,
TORONTO, ONT.

PROGRESSIVE TEACHERS ARE USING CHAPMAN'S LOOSE LEAF NOTE BOOKS

WHAT TEACHERS SAY OF THEM:—

- "In Writing, Drawing, and Science we find them absolutely indispensable."
- "Nothing could persuade us to return to the old methods."
- "They are a wonderful aid to the teacher."
- "Greatly beneficial to students who use them intelligently."
- "The most satisfactory Note-books we have ever used."
- "Just what I have been looking for."
- "They give good satisfaction—have no hesitation in recommending them."
- "We would not like to be without them."
- "They are excellent for systematic work."
- "I have seen nothing better."

IN USE IN NEARLY ALL ONTARIO HIGH SCHOOLS AND COLLEGES.

YOU should have them—if you are not familiar with them, write for samples. Free to Teachers. State subjects interested in.

A. & W. MacKinlay, Ltd.,
Halifax, Wholesale Agents.

The Chas. Chapman Co.
London, Canada.

shall notify the Chief Superintendent of the permission granted and the reasons therefor.

All schools, whether rural or urban, will re-open after the summer vacation, on Thursday, August 26th.

Regulation 31 has been enlarged by the addition of the following paragraph:

Candidates for license of the Grammar School Class who have passed, without condition, the examination known as the July Matriculation, and who subsequently received the degree of Bachelor of Arts at the Provincial University (or other college or university of recognized standing) with a ranking at graduation not lower than Second Division, shall be exempted from examination in all examination papers peculiar to the Grammar School Class. (See list as given on page 148 of the Manual of the School Law of New Brunswick, 1906).

CHANGE OF TEXT-BOOKS.

The following changes in school text-books take effect in the present term, viz.:

Goggin's Elementary English Grammar (W. J. Gage & Co.) instead of Meiklejohn's Short Grammar.

Hall & Stevens' Geometry (The MacMillan Co., Toronto,) instead of Hamblin Smith's Geometry.

The New Brunswick Copy Books (E. H. Harcourt & Co., Toronto,) instead of the Copy Books at present in use.

The History of New Brunswick, by Dr. G. U. Hay, will be discontinued as a Class Book, but will be placed, together with Canadian History Stories, by Emily Weaver, on the list of books recommended for the use of teachers.

W. S. CARTER,

Chief Superintendent Education.

Education Office, Fredericton, N. B.

July 23rd, 1909.

**Card Systems,
Loose Leaf Systems,
Duplicating Systems,
Self Balancing Ledgers.**

Modern methods of sifting out results.
Latest edition of Pitman's Shorthand.
These are some of our specialties.
Send for catalogue.



**S. KERR
& SON.**

Odd Fellow's Hall.

A CONTRACT FOR TEACHERS

"To Provide for Old Age."

This is one of the most important objects which you have to accomplish. You should at once make such arrangements that when you are advanced in years you will not be absolutely dependent on your own exertions for the necessities of life.

You can make these Arrangements in a Certain and Economical manner.

It will be to your advantage to secure particulars of a form of contract issued by the CONFEDERATION LIFE ASSOCIATION which will guarantee you an annual income for a term of years or for life, commencing at a fixed time in the future.

This contract also provides insurance protection, and should you die before the date the annuity commences, the payments will be made to your heirs.

Full particulars sent on application.

**Confederation Life Association,
GEO. W. PARKER,
PROV. MANAGER
ST. JOHN, N. B.**

MAKERS OF
PRINTING PLATES
J. G. Wesley Co.
HALF TONE.
ZINC ETCHING.
ELECTROTYPING. ST. JOHN, N.B.

**Everything
that is right
in
Stationery.**

BARNES & CO., ST. JOHN, N. B.

SLATE BLACKBOARDS.

CHALK CRAYONS, SCHOOL SLATES,
SLATE PENCILS, LEAD PENCILS,
SCHOLARS' COMPANIONS.

W. H. THORNE & CO., Limited,

HARDWARE MERCHANTS,

Market Square, SAINT JOHN, N. B.

EDGEHILL,

CHURCH SCHOOL
FOR GIRLS
INCORPORATED 1901.

WINDSOR, NOVA SCOTIA

The Bishop of Nova Scotia, Chairman Board of Trustees *ex officio*. The Bishop of Fredericton member of Board of Trustees

Lady Principal, Miss Gena Smith (late lady Principal of King's Hall, Compton, P. Q.), formerly Headmistress of St. Stephen's High School Windsor, England, assisted by Eleven Resident Experienced Mistresses from England, three of whom are specialists in the Music and Arts Departments) Housekeeper, Matron and Nurse.

Extensive Buildings, with capacity for 100 Residents. Heated by Hot Water; Lighted by Electricity. Grounds covering eight acres, with Lawns for Tennis, Croquet, Basket Ball, Hockey, etc School Dairy and Laundry.

Preparation for the Universities.

For Calendar apply to REV. H. A. HARLEY, M. A.

The Standard of the World

In the manufacture of School Furniture we are many lapses ahead of our competitors. For durability, beauty of construction, and superior points of merit, our goods EXCEL ANYTHING IN THE SCHOOL FURNITURE LINE.

Our New Patent "Ball Bearing" School Desks are all of one piece. They are absolutely the ONLY School Desks ever made having a Permanently Noiseless Ball Bearing Seat Hinge.

This device is NOT an experiment, but has been thoroughly tested, and its practicability proved.

Our Construction "Ball Bearing" Adjustable School Desks is the greatest success ever achieved in School Desk construction.

The time has passed when students must adjust themselves to fit the desks. If all the desks in a school room are adjusted to fit the students.

That is why our Adjustable Desk should be in every school room in the land.

Write for Catalogue

Canadian Office and School Furniture Co., Ltd.
PRESTON, ONTARIO, CANADA.