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## THE EDUOATIONAL REVIEW.

G. U. Hay, St. John, Halifax.

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## CONTENTS:

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 TALKS WITH TEACHERS - $\quad . \quad-\quad-\quad$ - $\quad$ 138-187 TEACHERS ASSOCIATIONS - . . . . . . 187-141The Woodpeeker Fointy

- 141-148
- 148-146

Drawing in the Publie Schools - The Canadian Club of
Drawing in the Publie Schools - The Cauadian Ciab of
SELECTED ARTICLES--A Reply
The New and the Old Way Round the World-Arithmetic-
about Some Nova Scotia Boys, ete.
Question Department-School and College-. . . . . . 148-149 Book Reviews-The January Magazines- . . . . . 149-150

The offer to send the Revisw and Cosmopolitan for Two Dollars a year is meeting with a ready responee from all sides. It would be difficule to obtain cheaper or more excellent reading matter for a year.
SEE clabbing rates with magazines on another page.
As a result of the P. E. I. elections held on the 13th ult., the liberal government led by Hon. Fred. Peters, has been sustained by a large majority. The opposition numbers only seven in a house of thirty members.

According to Vol. II of the Census Reports of Canada, 1890-91, Charlotte County easily leads the other counties of New Branswiek in the matter of general school ed ucation. It has less illiteracy according to population than any other connty. It goes further than that-it is surpassed by but few other sections in the Dominion.

THE Principalship of the Girls' High School, Montreal, is vacant. See theadvertisement in another column.

The excellent lessons on drawing which are appearing from month to month in the Review have attracted the attention of our teachers to this subject. Prof. Dodge is doing a good work in leading teachers to substitute natural and more practical methods for the vague and characterless work attempted in too many of our schools under the name of drawing.
Among the subjects for papers and discussion at the next N. B. Provincial Teachers' Institute, which meets in St. John in June next, are the following The Demand for a Broader and Higher Scholarship in Teachers; The Urigin of Names of Places in New Brunswick, with Associations Connected with them; Practical Lessons on Physics and Botany; Woman's Influes e in Education. The discussion of these subjects, with the public educational meeting and an evening spent with the Natural History Society, will make up a very excellent programme.
The Review and Goldthwaite's Geographical Magazine, one year for $\$ 2.50$.

The Toronto Educational Journal published an excellent Christmas number. The steady and marked improvement in the appearance of the Journal during the past year, and its just and discriminating treatment of educational questions, are evidences of its increasing influence.
"Canada's Intellectual Strength and Weakness," was the subject of Hon. J. G. Bourinot's address as President of the Royal Society of Canada, in May last. It attracted considerable attention at the time as was to be expected, not only from Dr. Bourinot's reputation as a man of letters and writer on constitutional questions, but also from his position as president of the leading Canadian society of literature and science. Numerous additions have been made to the monograph in the shape of bibliographical and other literary notes, forming a ground-work, as the writer states, of a series of historical and other essays which will be regularly brought out in future under the auspices of the Royal Society.

In Dr. Bourinot's necessarily rapid but excellent review of the intellectual development of the Dominion, he sums up, hoping that "with the expansion of our mental horizon, with the growth of experience and knowledge, with the creation of a wider sympathy for native talent, with the disappear ance of that tendency to self-depreciation which is so essentrally colonial, and with the encouragement of more self-reliance and confidence in our own intellectual resources, we may look forward with some degree of hopefulness to conditions of higher development."

Jtodar Fraskr has been appointed Lieut. Governor of New Brunswick in place of the late Lieut. Governor Boyd. The long experience in public life of Governor Fraser and his amiable character make the appointment a rery popalar one.
THE London (Ont.) Adverliser in a recent isue says

The Toronto. School Roard is this year engaged in an experiment which will be closely watchet by other educational bodies. The trustecs, on the suggerstion of the Inspeetor, have decided to try a new system with a view to abolishing the method of promotion by examination. The system which it is proposed to sutmettute is that of monthly examivations, to be held by each teacher. Who will thus be able to juilge at the end of the term which pupils have the beat average capacity. and promotions will be made wholly on this average. It the new system has the effect of dolng away with grinding up fir examinations, often litle better than mechanical performances, and in establishing soild understandings in the youth. the change will be an improvement. The smartent answerer of catch questions is not always the most fully intellectually equipped.

## A LIVE SOCIETY.

The N. B. Natural History Society is accomplishing an excellent work. Since its re-organization, about twelve years ago, it has published annual bulletins in which the progress of the Society and the work it has accomplished are recorded. Bulletin No. XI has just been issued, containing the following table of con-tents:-The Annual Address of the President; G. F. Matthew, M.A., F.R.S.C., on "The Climate of Acadia in the Earliest Times;" "Notes on the Geography and Natural History of the Tobique," by Geoffrey Stead, C. E. ; Observations on the Distribution and Habits of some New Brunswick Fishes, by Philip Cox, A. B., B. Sc. The latter is the most important contribution to the study of our fishes since the days of Moses Perley. It records several species new to the Province; and from Mr. Cox's industry and skill as a naturalist, much may be expected of him, to judge by what he has already accomplished in this important branch of our natural history. The botanical committee makes a very interesting report, giving the locality and discoverers of no less than thirtyseven species of plants new to the Province, found within the past three years.

The Society has undertaken within recent years, in addition to regular monthly lectures, courses of elementary lectures in science, with a view to attract to its lecture hall and museum the general public, and more especially the teachers and students of the public schools in St. John. The courses for the present winter embrace three lectures in each of the following subjects :- Palæontology, Bacteria, Birds, Plants.

Such a society is deserving of more extended recognition and support from the Government and people of the Province than it receives.

## PROFESSOR MACDONALD'S PAPER

In the December Revigw there appeared a very able and scholarly paper read by Professor Maedonald at the recent opening of the Normal School at Truro. But the paper deals with one phase only of education - the development of intellectual power. It is unfortunately true that a very large proportion of those who have the highest reputation as teachers aim at nothing more than the training of the intellect. How far man can go in this direction, and by what means he can secure the most wonderful results may be learned from the history of the Athenians. But the same study shows how defective is such a one-sided education,-falling in the end to secure not only the result sought, but also results of much greater importance.

Although the Professor asserts that the development of intellectual power should be the chief aim of the high school course, yet wo do not think that he intends to undervalue tae necessity of physical training or that he iguores the paramount importance of character building, including the formation of correct habits.

He asserts that present conditions in our high schools are unfavorable to the development of scientific habits of mind or healthy bodies-the number of subjects to be studied, and the hurry to pass an examination on them results in cramming, superficial. ity and mental debility.

He recommends that on entering the high school the boy or girl of the average age of thirteen be requested to select a favourite subject for a major study-a subject to be studied thoroughly, systematically, deeply, down to the very roots, while all the other subjects may be passed over with minimum marks.
Until we have very much better teachers than at present, we cannot crowd into the aommon school course more than it already contains.

Our best pupils at the average ages of thirteen or fourteen, when leaving the common schools and entering the acadamies, are only just beginning to get some glimpses of the realities of the outer world. Their powers of observation have been partially oducated, and they have accumulated many facts, but they do not know the meaning. Of their own power and aptitudes they have scarcely began to think. External circumstances may have forced them to turn their attention to certain pursuits or subjects more than to others; but they are incapable of intelligent choice.
The object of the high school is to give the pupil a general and comprehensive view of the world
around him before he is subjected to the narrowing effects of some special pursuit. If he is ever to see all things in their true perspective, and form valuable, reliable judgments for his future guidance, he must in youth have a comprehensive grasp of all the elements of knowledge; as well as in more mature years have a deep and profound knowledge of one or a few subjects.

It is an infinite variety of healthful recreations throughout the extended period of growth that develops symmetrical physical beanty.

It is a wholesome interest in and pursait of every kind of knowledge during the first sisteen or eighteen years of life that will lay the foundation for genuine culture in the "school of life," or in the university.
We think, then, that reserving exceptional cases, academy teachers should strongly discourage elective courses.
In corroboration of our views we might quote the opinions of the ancient philosophers, Aristotle and Quintilian. Or from later times we might cite the authority of Comenius-the first evangelist of modern pedagogy. In advocating the concurrent stady of several branches, Quiftilian says: "Must he learn grammar alone and then geometry, and in the meanwhile forget what he first learned! As well advise the farmer not to cultivate at the same, time his fields, his vines, his olive trees and his orchards, and not to give his thought simultaneously to his meadows, his cattle, his gardens and his trees."

The most distinguished modern educationists are of opinion that the "five fundamental disciplines" should enter about equally into the curriculum of the high school and be all imperative.

Dr. Bicknell, President of the New England Association, asks whether boys and girls, in their teens, are the wisest judges as to the best studies to be pursued. "Are we to commit to the untrained and inexperienced the solution of a problem by chance, choice, or whimsical caprice, which the wisest and the best of the world have wrought out by the slow processes of educational evolution?" "We must declare that some studies do enter as constituents into a liberal education; that others are elective, and that the latter should not infringe on the former."
Special attention to "one major subject, or groups of related ones, cannot, according to the laws of growth, produce satisfactory development of so amazingly complex a being as man.

A diet composed mainly of one article is not considered so wholesome or agreeable as a mixed diet.

Dr. Harris, U. S. Commissioner of Education, Dr. E. E. White, and all other such men are earnest advocates for the prolongation of the time devoted
to the all-ronnd disciplinary studies. They claim that in the modern conditions of cirilization the narrowing tendency of special studies requires to be corrected by a generous culture before the student is tied down to a special pursuit.

In an age of machinery and subdivision of labor the boy would become about as mechanical as the machine which he operates, unless the windows of his soul are first opened towards all quarters of the horizon.

That is just what our presont course of study is well calculated to do. It is therefore founded on sound pedagogical principles and any departure in the direction indicated by the Professor would be a retrograde movement.

But if the adoption of a major study in our academ. ies is unsound theoretically it is still worse practically. It would introduce confusion into every acaliemy in the prorince.

Take Halifax Academy, for instance, with its eight special teachers. It discourages options by imposing a fine of $\$ 4.00$ or $\$ 8.00$ a vear, according to circumstances, upon students not taking the full course.
Latin is considered compulsory upon all who enter, although in the prescribed course it is optional. And yet it is a difficult problem to provide for all the classes. How much more difficult in academies not so well equipped? And how utterly impossible with all kinds of major studies clamoring not only for recognition but for special attention.

This system prevailed to some extent at one time in Truro Academy and the result was confusion and failure. But now that "the five fundamental disciplines" are insisted on, its work is harmonious and satisfactory and its record most brilliant

In our experience we have found that the students who take the full course, and perhaps optional besides, invariably succeed best in each subject-beat the single-stady boys in their farorite study.

Contractive elective courses or special attention to a major study, as a rule, only tends to encourage laziness, and develop one-sidedness and inefficiency. Such is the universal testimony of educators. Speculation comes soon enough in the colleges-sometimes too soon.

We will mention just one other inconvenience arising from such a one-sided system. A teacher whose major study was Latin, and who made ten, fiftecu, or twenty per cent on ecience, barely knowing the technical terms, goes to an agricultural section and tries to push his favorite study among the farmers boys. There will be some dissatisfaction.

A nother teacher, whose major study in the academy was history, and who barely passed in drawing and b ok keeping, going to a manufacturing or mercantile
district, will scarcely gain the respect of his patrons: or pupils.

No, our present system approaches the ideal in its excellence.

The superficiality, maccuracy and want of mental power characteristic of many schools arras not from any defects in the course of study, but from the want of really capable toachers who know how to apply it

All subjects, if well taught, are capable of developing the scientitic habnt of mind and industry.

Latin is a favorte and effectwe subject for that purpose, because it riquires less skill and labor on the part of the teacher than science, or almost any other subject.

White not agreentug with the Professor in his main proposithon, we wish to call special attention to the bery able, clear and combong manoer in which he shows the immense adraitage of mental diacipline over mere knowledge - not by any means a work of supererogation in these uthlitarian umes. We hope, however, and believe that the day is coming when the most useful knowledges can be uthlized to secure the broadest and deepest culture.

The Professor's advice to teachers, to be in earnest in the pursuit of some favorite study, is most excelleut and happily expressed. Lake Arnold, of Rugby, ne would not have their pupils drunk from stagnant pools.

## TALKS WITH TEACHERS.

A nother term has begun. Hare you taken care to answer all communcations from trustees in answer to your applications? After requesting the Inspector to secure you a school, have you invariably notified bim when you have elther accepted a position gained by other means or by his recommendation? I have spoken to you before about this, and have told you of the confusion that is very offen caused by neglect of this kind. I hope you have not at the end of the term given up a school to which yon were pledged for another which seemed to you preferable. Though you may not be bound by a contract, such conduct is most dishonorable, and causes much trouble to trustees, in isolated districts especially. That trustees are at times discourteous and io not always answer letters even when stamps are enclosed, is too true, but do not be influenced by such methods to
retaliate.

There is another matter to which I bave referred before. When writing to an Inspector to secure you a school, or on your own privale business, enclose a stamp or post card for a reply. . In any matter relating to the general welfare of the schools, do not do
8. You are perhaps not aware that the Inspectors have to pay their own postage as well as travelling expenses. A first class male teacher has been known to pre-pay a letter of application by a one cent stamp making the Inspector pay four cents to get the letter and three ceuts to answer it (if he did so) all for the privilege of obtaining a school for him.

Some teachers of the third class holding licenses granted before December 31et, 1893, have the impression that they are no longer valid. Such is not the case. All third class licenses granted after that date are valid for only three years. Third class licenses granted before that, are valid during good behaviour.

Look out for the new temperance texts which come into use at the beginning of this term. Observe carefully the teacher's contract. There are some differences, as has been pointed out in the Review previously. See that the trustees make provision for the proper heating of the school house. Days lost owing to cold houses will not be paid for by the Province. 'The crustees are supposed to pay for them, but they seldom do.

If any Board of School T'rustees refuses to pay for the days allowed the teacher for the purpose of attending the County Institute after proper notice has been given it by the teacher, report the matter to the Inspector. He will most likely find means to compel the Board to do so.

If your Secretary has not sent a copy of the minutes of the school meeting to the Inspector, please advise him to do so.

Ascertain whether or not you are teaching in a poor district. Some changes take place each year.

Be sure to inquire of your Secretary before sending to the Inspector for a register blank. It is usually sent to him.

Speak a shade more kindly
Than the year before;
Pray a little oftener,
Love a little more;
Cling a little closer
Life below shall liker grow
To the life above
I have been a subscriber to and reader of the Refiew from its infancy, and have found in it a valuable friend and helper in my work. Am pleasèd to notice the improvements you have been able to make from time to time, and wish for you and your paper many New Years of prosperity and usefulness. Tracadie, N. B., Dec. 18th, 1893.
B. D.

## Teachers' Associations.

Hante and Kings Counties, N. S.
The teachers of Inspectoral District No. 5, concluded a very successful Association on December 22nd ult. The meetings were held, principally, in the new town school house. About one hundred teachers were in attendance. After the enrolment. of members, Inspector Roscoe, in a few well chosen words, welcomed the Association to the university town of Wolfville, and hoped the surroundings might be congenial to all. He welcomed the teachers to our homes, and to the meetings of this educational gathering, and felt assured from the deep interest each had in the work to be done, no one would leave a word unsaid that may bring help to a fellowteacher.

Mr. Stephen Rogers, of Habitant, read the first paper on "The Relation of Parents to the School." In early times the education of the child was entirely in the hands of the parents. Even now, when teachers are specially trained to teach, young parents often persist in interfering with the teacher in his duties. He maintained that parents had no right to interfere with the teacher in the selection of stadies and text-books, so long as. he follows the course of study as a guide. The studies of the course-imperative and optional-were wisely selected and adapted to the needs of the papils of public schools.

Miss Lily A. Scott, of Wolf ville, gave a very interesting lesson on "Scientific Temperance" to a class of Grade IV pupils. She illustrated by the use of a microscope how alcohol is made, explained its poisonous effects upon muscle, brain, etc. She declared it a thief, and proved the truth of Shakespeare's lines:
"Men put an enemy in their mouth to steal away their brains." She showed the necessity of protection ugainst this thief. The door must be locked. The key was the temperance pledge.
Mr. Isaac Crombie, B. A., of Hantsport, gave a paper on "Spelling," In a concise and practical manner, he described his experience in teaching this difficult subject to Grades IX and X. He said that having learned that memorizing long lists of wordsminus sense and context-was a failure, he adopted the dictation method. This was best performed by assigning a number of words which the pupils were to use in sentences that would clearly illustrate their meaning. As a means of arriving at the meaning of the words be required his pupils to learn the roots, prefixes, and suffixes, and derive their meaning from the original language. This plan worked well with him. Mr. C. urged the importance of the use of the Saperseded Speller in our Schools.

On Wednesday evening, the teachers were enter tained by Inspector Ruscoe, where they met Dr. A. H. MacKay, Saperintendent of Elucation: Professor Tufts and Coldwell of Acadia College; Prof. Oakes of Horton Academy; Prof. Saville of the Horticultural School, and Dr. Hall of the Normal schoolt, Music, games, and the discussion of educational topics were heartily engaged in; and all seomed to extract pleasure from the occasion.
Thursday, a. m., Mr J. N. Sturk read a paper on "The School Master and his Work." He showed the important mission of the teacher, how he moulded the youthful mind when it is "wax to receire, but marble to retain." This paper was well received from a teacher so young as the writer.
The Association then repaired to Prof. Coldwell's laboratory in the college, and were entertained and instructed in the Professor's happy method of presenting a subject. He eshibited a cheap set of apparatus and illustrated its use by various experiments. By having the apparatus in readiness, with the and of some of the teachers, the experiments followed in quick succession, and much was accomplished in the hour. The Professor showed how to construct such apparatus as an ordinary school needs. The lesson was suggestive, and will be very valuable to all who are trying to do work of this kind. The Association evinced their interest by the closest attention.
The museum, library, seminary, and manual training schools were visited by the teachers through the courtesy of Dr. Sawyer, Miss Graves, and Prof. Oakes.
Thursday, p. m., Mr. J. F. Godfrey read an excellent paper on " Dr. Arnold as a Teacher." Education has ever been the most difficult field in which to dis. play originality, because in this field there was the greatest temptation to conservatism; and innovation meets the strongest opposition among educationists themselves. Among those teachers who have triumphed over iguorance and prejudice, the foremost stands Dr. Arnold, of Rugby. This great man had as his motto-good order, willing obedience, active work. His success depended not on tact, but solely upon industry and attention. Unflagging industry must succeed. Study the minds of and seek to understand the children and their wants; expect from boys the work of boys only, not men. Ever seek to improve; be not satisfied with what has been done.
"Dr. J. B. Hall of the Normal School, then gave a "Lesson in English" to a class of Grade IX pupils. Howe's poem, "My Country's Streams," formed the basiz of the lesson. The exercise combined reading, literature, analysis and parsing, and was taught in the Dr.'s happy style. He has the faculty of being
pleasant himself, and of making his pupila feel pleasant two strong points in good teaching. The audience enjoyed the lesson very much. Dr. Hall is alwars welcome at teachers' meetings.

Miss N. A. Burgoyne, at this stage, read a paper and taught a lesson on the "Tonic Sol-Fa Notation." The history, the popularity, and the merits of this notation were clearly presented in a carefully prepared paper. She quoted many distingushed musicians as authority for the statements made. At the suggestion of Dr. Mackay, the Assoctation by vote, riquested Mise Burgoyne to consent to the publication of this valuable psper. The lesson took the Association through some of the elementary stages of the notation in Miss Burgoyne's clear and concise method of presenting a subject and was a delight to all who had the pleasure of hearing $1 t$.

On Thursday evening a public educational meeting was held in College Hall in connection with the formal opening of the new school-house. In the absence of Mayor Bowles, Inspector Roscre presided. Mr. E. W. Sawyer, of the School Board, was called upon and spoke of the great improvement made in edncational facilities in connection with public school instruction in the last decade. He referred to the history, etc., of the new house, and said the people had unanimonsly voted money for its erection and for heating and ventilating it in the most approved way, as soon as the need of such a building was intelligently placed before them. Dr. A. H. Mackay, Superintendent of Education, congratulated the school board and town upon having erected a building ao well adapted for school purposes. He attributed the sentiment of such preparation for the public schools, to the presence of such magnificent buildings as the one in which we were assembled, and the adjoining institutions. He dwelt upon the method of heating and ventilating by the "Fuller and Warner" system. Amherst, Yarmouth, and Wolfville had introduced this system, and were setting examples worthy of imitation by other towns and sections. He compared the educational advantages of the present with those of the past, and showed the superiority of the former.

Dr. Hall described his visits to the schools of the various European countries as well as those of Canada and the United States, and noted the points of contrast. While in many respects our schools are superior to those of Germany, we can with profit imitate the Germans in physical training, school etiquette and the study of horticulcure.
J) r. A. W. Sawyer, while engaged in university education, sympathized with his fellow-teachers in all their endeavors to advance the interests of the public schools. He congratulated the school board
upon the fine house just completed, and expressed a hope that they might set an example to the governors of the college in the matter of beautifying and improving the grounds.

Prof. Oakes spoke at some length on the importance of Civics as a subject of study in the schools. He thonght that every school boy should be taught his duty and responsibility as a citizen.

Prof. F. H. Eaton urged the importance of optional studies in the public schools.

Prof. Faville, who is to have charge of the Horticultural school to be opened in Wolfville in January, was introduced and spoke for a short time in regard to the work be came to do.

Prof. E. M. Keirstead was the last speaker. He emphasized the importance of good ventilation in school buildings, and referred to the paper and lesson of Miss Burgoyne in very complimentary terms. Excellent vocal and instrumental music was furnished by Mrs. Witter, Mrs. Orandall, and Miss Fitch.
friday, a. m . The session began by voting that the next meeting of the Association be held in Windsor.
The following are the officers:-Inspector Roscoe, President; J. A. Smith, B. A., Vice-President; C. E. Seaman, B. A., Sec.-Treasurer. Executive Commit-tee:-Principal Crombie; Principal Robinson; Miss Burgoyne, Miss McIntosh.
Mr. E. H. Nichols, B. A., of Kentville, read a paper on "Normal Schools." He advocated the necessity of teachers having professional training to place them on an equality with the other professions. Mr. J. A. Smith, B. A., of Windsor, introduced the "Metric System" by a short paper, in which he gave its bistory and claims upon us; and taught an excellent lesson illustrating the system. He thinks it must soon come into general use. The Superintendent of Education followed, showing the necessity of maintaining this simple system, and thanking Mr. Smith for presenting it so clearly. The discussion of the various subjects was an interesting feature of the A ssociation. Messrs. McLeod, Smith, Robinson, Lee, Sturk, Dr. Hall, Prof. Coldwell, Prof. Oakes, Dr. MacKay and others participated in it.
The Superintendent of Education preferred to come in incidentally to answer questions, instead of giving a formal address or paper on "Science." A number of such questions came up during the meeting, which were readily and very satisfactorily answered by Dr. MacKay. He is certainly at home, with chalk in hand, before the blackboard, elucidating some perplexing point of science. At all these meetings Dr. MacKay put himself in touch with the teachers and their work, and seemed to delight to
answer questions put to him. The teachers of this District hold the Superintendent in high esteem. To quote from two of their reports: (1) To the Hants Journal, "It is needless to" say that Superintendent MacKay has won the respect and esteem of all." (2) To Halifax Herald, "It was an inspiration to the' teachers to come in contact with him who is now the head of our public school system. Dr. MacKay will always be welcome among ne."

A vote of thanks to the people of Wolfville for free entertainment, and short addresses by Dr. MacKay and Inspector Roscoe, bronght the Association to a close.

## St. John County Teachers' Institutg,

The St. John County Teachers' Institute met in the Centennial School building December 21st at 10 A. M. Thos. Stothart, President, in the Chair, Malcolm D. Brown, Secretary. The enrolment fee was fixed at 25 cents. About 170 teachers enrolled. The Treasurer's report was read, showing a balance of $\$ 5.41$. An excellent paper on Drawing was read by Mr. J. Harrington. The discussion on the paper was participated in by Messrs. G. U. Hay, Inspector Carter, Miss Murphy, Thos. O'Reilly, W. H. Parlee, and James Barry. Mr. W. D. Baskin, one of the St. John School Board, who was present, said he believed the curriculum was overloaded and imposed a strain upon the pupils. He also was of the opinion that the mode of grading pupils was defective, and expressed a desire to have the matter discussed. Inspector Carter replied, stating that greater demands were being made upon the schools each year, and that we must keep step with the times. Instead of the course of study being curtailed, the prospects were that it would be enlarged. He also thought that few, if any, pupils were injured attaining a mere pass, but that as in every other competition, overwork was the result of ambition to excel and obtain prizes or standing. He moved that an hour of the afternoon session be devoted to the discussion of grading pupils. This was carried. After enrolment in the afternoon, Miss M. E. Hayes read a practical paper on Composition. It was discussed by James Barry, W. T. Kerr and others. The question of grading was then taken up and provoked a lively discussion. Messrs. Baskin, Coll, Nase and Hetherington, of the St. John School Board were present. The majority of the speakers were of the opinion that the grading should be by the teachers alone. The minority favored the idea that the teachers should have a large voice in the matter, but that the responsibility should be shared with the officers of the Board. The speakers were Henry Town, G. U. Hay, James Barry,
W. M. McLean, W. H. Parlee, and Inspector Carter. The members of the Board being invited to speak, declined to express an opinion on the subject, as it was soon to come before them officially, but they expressed satisfaction at the discussion, and regretted to see so many teachers so apathetic regarding the matter, that they did not wait to hear the full discussion.
After roll call, on Friday morning, Inspector Carter read a note from Dr. Inch regretting his inability to be present. An excellent paper on Physics was then read by W. J. S. Myles, A. M. The paper was discussed by Messrs Hay, Harrington and others. The Institute then divided into sections - primary, intermediate, and advanced-and discussed matters appertaining to the work in these divisions.
At the afternoon session after routine, Inspector Carter brought to the notice of the teachers the Educational Review. He spoke of the benefit it had already been to the teachers of the Province, and of the large field of usefulness before it. It was entirely worthy of their confidence and sapport. A number of questions in the question box were then dealt with. President Stothart proved himself an adept at solving knotty problems. Mr. John Montgomery not being able on account of illness to be present to read his paper, it was read by the Secretary. The paper, which was on School Discipline, was a very practical one. A short discussion followed. The election of officers resulted as follows:-John Montgomery, President; Miss Kate Kerr, Vico-President; M. D. Brown, Secretary-Treasurer; Executive Com-mittee-C. J. Morrison, J. F. Black, Miss Annie Hea. Inspector Carter moved-That this Institute heartily commend the action of the city teachers regarding the action they have taken in preparing a memorial to the memory of the late Lt. Gov. Boyd. On motion the Institute adjourned.

Kent Co., N. B., Teachers' Institute.
The Kent County Teachers' Institute was held at Richibucto, November 16 th and 17 th . About twentyfive teachers attended. Chief Supt. Inch and Inspector Smith were present and took an active part in the proceedings. An excellent opening address was given by Vice-president, Mr. Geo. A. Coates, Principal of the Kingston Superior School, who occupied the chair. The following officers were elected:-Inspector Smith, President; Miss Isabella J. Caie, Vicepresident; H. T. Colpitts, Secretary-Treasurer; A. E. Pearson, and Miss Teresa McDonald, members of the Executive Committee. Papers were read by Mr. A. F. Pearson, Principal of the Superior School, Buctouche, on " Discipline in Schools;" by Mr. J. E. B.

Clarke, Principal of Superior Sohool, Bass River, on the "Importance of Teaching Temperance in Our Schools (read by Miss Maggie Graham); and by Mr. Goodwin, Principal of the Superior School at Harcourt, on "Grammar." Interesting discussions followed the reading of these papers, taken part in by H. T. Colputs, J. D. Phinney, M. P. P., Mr. Coates, Mr. Ferguson, Mrs. Allan, Dr. Inch, Inspector Smith, Miss Casie and others. A public educational meeting was held on the evening of November 16 th . Inspector Smith in the chair. Addresses were made br the President, Chief Supt. Inch, George V. Mclnerny, M. P., and J, D. Phinney, M. P. P. There were some excellent addresses given which were listened to by a large and intelligent audirnce.

Intereatino Mektinu at Sprinobili, N .
The teachers' association for district No. 10 met in annual session at Springhill on Thursday and Friday, December 8 th and 9 th, about one hundred and ten teachers being present. Besides the teachers, Superintendent of Education (Dr. Mackay), Prof. Lee Russell of the prosincial normal school, Truro, and Inspector Craig were present. The session was one of the most profitable and interesting yet held.
On Wednesday erening a reception was tendered the visitors by the Springhill teachers. A good programme was furnished by the orchestra, assisted by the leading musical talent of the town.
Inspector Craig, president of the association, opened the first session on Thuraday morning, with a short address of welcome, after which the programme of the session was taken up, the first being a paper on "The Teaching Profession," by Mr. W. M. Ferguson, of Tatamagouche. W. R. Slade, of Oxford, read an excellent paper on "The Effect of Alcohol in the Tissues." These papers elicited more or less discussion. Mr. A. S. Ford gave a lesson illustrative of the tonic sol-fa system.
At the afternoon session Prof. Lee Ruseel gave a splendid paper on "Manual Training." Miss Peppard, of Onslow, read a very interesting paper. In the evening a rousing educational mass meeting was held in Fraeer's Hall, Town Clerk McLeod presiding. Addresses were given by the chairman, Dr. Mackay, Prof. Lee Russel and Inspector Craig and Rev. Mr. Wright. Splendid music was furnished by the Springhill orchestra.
The first matter of business taken up the next morning was the election of the following officers: President, Mr. Craig; Vice-president, A. s. Ford; Secretary-treasurer, A. D. Ross. The executive consist of the above officers and Messrs. Ferguson (Tatanagouche), Campbell (Parrsboro), Slade (Oxford),
and Misses West (Amherst), Grant (Springhill), Cameron (Parrsboro), and Orandall (Oxford).

Atter the election, Mr. A. S. Ford gave another lesson in the tonic sol-fa system. Mr. Scanlan, of Nappan, who spent a large portion of his vacation at the World's Fair, three days of which were spent in the educational department, read a very interesting and instructive paper on "The Educational Exhibit at the World's Fair." Principal Ruggles of Acadia Mines, with a class from the Springhill academy, gave a lesson illustrative of his method of teaching writing. Principal Torry, of Springhill, read a paper, "Short Cuts in Arithmetic." The discussion of these papers occupied considerable time and were very interesting. Inspector" Craig gave a valuable talk on "School Returns."
At the afternoon session Principal Campbell, Parrsboro, read a paper on "The School Section as an Edacator." This paper called forth much.praise, and by request of the convention will be published in the educational Revibw. A paper on "The Teaching of Mathematics" was read by Principal Healy, Pagwash. After the discussion of these papers and on the suggestion of Dr. Mackay, "The Course of Study" was thrown open for discussion, and all seeming difficulties as presented by the different teachers present were explained away by the superintendent, Dr. Mackay, to the entire satisfaction of the convention.
The usual votes of thanks to Dr. Mackay and Principal Russel for their valuable assistance, the railways for reducing fares, the teachers and town council for their reception, etc., were passed. Much regret was expreseed that Mr. E. J. Lay, principal of the Amherst academy was prevented from being present by the serious illness of Mrs. Lay.
In the absence of Mr. Lay, Mr. A. S. Ford, on behalf of the Amherst teachers, extended a hearty invitation to the convention to meet at Amherst at their next eession, and by a unanimous vote of the convention the invitation was accepted-Halifax Herald.
In both France and Germany one-fourth reduced to a decimal is written as 0,25 ; in England it is written 0.25 (always with the period at the top of the line), and in the United States in this way, 0.25 . France and Germany always use the comma, England and the United States the period, the only difference being the manner in which it is placed upon the line. Sir Isaac Newton is given the credit of originating the present English method of using the decimal point, his reason being that by placing it at the top of the line it could be distinguished at a glance from the "full stop" punctuation mark. All English mathematicians use the mark in the way proposed by Newton, and the period as a sign of multiplication.Scientific American.

For the Revisw

## HATURE LESSONS.

The Woodpeeker Family.


Hatry Woodprcire, $\times 1$.
Here is the Hairy Woodpecker, so called from the hairy character of the feathers on its back. Its dress is made up entirely of modest white and black, except in the mále, who, in addition, sports a scarlet patch on the back of his head. The white covers all the uuder part of the body, and the side feathers of the tail. Its black upper parts are marked with a white patch along the back, a white collar band just over each shoulder from which a white curve runs below the eye to the forehead, matched by an opposite curve running from the eye nearly to meet the other curve at the shoulder. The eje is partially within this white line parenthesis. Then there are numerous smaller spots of white on the wing feathers. But see how its claws grip the bark of the tree on which it climbs. Two
 toes are in front and two are behind. Even were the poor bird shot these sharp claws might still keep their hold in
the bark. There is a good reason then, you see, for calling these birds "climbers," so well are their feet constructed for such an exercise, But their woodpecking performances are perhaps even more conspicnous. How many times have you seen them chiseling a hole through the bark of a suspicious looking tree for the worms or other insects guessed to be finding shelter there. How many a time have the boys going into the woods seen a hole bored into the side of an
old tree, turning downwards and becoming larger until there is room enough for a safe and cosy nest for the little woodpeckers who are content to lie on a bed of fine wood chips, with which the bottom of the nest is lined. What a wonderful combination of hammer and chisel we find in their head and bill.

Bus there are no less than eight different kinds of woodpeckers to be found in our country, and bow sball I enable you to know one from another, and know their proper names? Let me try.

First, we have two very much alike, the Hairy Woodpecker, figurell above, and the Downy Woodpecker but little over six inches in length, while the former is about nine inches in length. Besides being smaller the Downy has its white outer tall feathers marked with black, while these feathers in the Hairy are generally pure white.

Then we have another two which are rather rare at present in these provinces. They differ very markedly from all the other woodpeckers by having only three toes, two in front and one behind. The first and more common is the Arctic Three-toed Woodpecker, about the same size as the Hairy, nine inches, but having no white on the back or the top of the head. For this last reason it is sometimes called the "Black-backed Woodpecker." The male distinguishes himself by a patch of yellow on the top of his head. The second is the American Three-toed Woodpecker, about an inch shorter than the other, marked with white bars or a white stripe on its back; for this reason sometimes called the " White-backed Threetoed Woodpecker." This last is very rare in Nova Scotia, having not been seen by many of its ornithologists. We are now half done.

Our fifth is a very common bird, the Yellowbellied Woodpecker, about eight inches long. The upper parts of its body are black and white, but the lower parts instead of being all white are strongly tinged with yellow on the belly, chin scarlet and throat black in the male, but both white in the female. The crown is red in the adult male and often also in the female. A long white patch on wing. This is the species which is particularly injurious to trees, some say the only one,

Next comes a couple of relatives, most distinguished in appearance, but now becoming extremely rare, especially the latter one. These are the Pileated Woodpecker and the Red-headed Woodpecker. The former is a giant, being about eighteen inches long, black but with a broad white line ranning down from its head along the side of its neck beyond the shoulder and a brilliant scarlet crest. In the male this crest is more extensive and there is a line of scarlet running from the bill below the eye in addition. This is the
bird which sometimes selecting a resonant limb of decayed pine or hemlock and bracing itself by means of its tail, drums on the wood with its bill with such tremendous rapidity and force that the noise of its thunder can, in a still day, be heard miles away in the forest. The other species, perhaps a little over nine inches long. can be easily distinguished, if seen, by ita bead and neek being crimson to the shoulder, ite under parts white and its upper parts blue-black with.a large white bar across its wings.

Lastly we come to the most common of all, the Flicker, "Yellow Hammer" or "Golden-winged Woodpecker," as it is called by different people. It is twelve inches long, head ashy colored with a red crescent behind; back, drab and black; rump. white; below, pinkish brown shading into yellow; a black crescent on the breast; belly with numerous round black spots; and the under surface of its quills golden yellow. When flying in the sunlight this gold makes its wings appear to flicker like a flame. Hence the name. At the end of our lesson we shall give a specimen story of an observation made on these two last mentioned Woodpeckers, by an eminent ornithologist, Dr. Jasper, who made a drawing of the scene from nature, as well as a word description. But here let us recapitulate by writing down in order the names of our Woodpeckers as they are. recommended to be used by that great anthority on birds, the American Ornithological Union, with their length in inches, and any other short remarks.

1. Hairy Wondpecker, 9 inches, common resident, outer tail feathers white.
2. Downy W ood pecker, 6 inches, common resident, outer tail feathers white with black.
3. Arctic Three-toed $\mathbf{W}$ oodpecker, $\mathfrak{y}$ lnches, not common, black-backed, yellow head patch on male.
4. American Three-toed Woodpecker, 9 inches, very rare, white bars or patch on back.
5. Yellow-bellied Woodpecker, 8 inches, very common, red on crown, injurious to trees.
6. Pileated Woodpecker, 18 inches, uncommon, red-crested the largest of all.
7. Red-headed $W$ oodpecker, 9 inches, rare, head and neck crimson to shoulders.
8. Flicker, 12 inches, most common, crescents scarlet and black.
" Teach the rising generation the science of music in all the schools, and you teach them the habit of closest thought, accuracy of expression and refinement of manner. Song is the language of gladness and the utterance of devotion. It is also physically beneficent-it raises the circulation-wakes up the bodily energies - and diffuses life and animation to all."-Sel.

## The Flicker and Red-Headed Woodpecker.

Time, the month of May; place, two and a half miles from Columbus, Ohio, U. S. A. A pair of Red-headed Woodpeckers had a nest in the old stump of a decayed tree; the entrance to it undoubtedly had been made by the Flicker, as the size of it indicated it being considerably larger than the Red-heads usually make. I had previously examined this nest; there were four eggs in it at the time. At first a male Flicker tried his best to force an entrance, but was effectually repulsed by the Red-heads. The female Flicker was during this time most indolently sitting on another stump of a broken tree, seeming not to take any interest in the doings of her mate; but some time after, perhaps pressed by the necessity of laying ber egg, she took an active part against the Red-heads, and the united strength of both finally overpowered them, and they had to abandon their nest and eggs to the Flickers, who, in their turn, after having thrown out the eggs of the Red-heads, installed themselves in the nest.

Theodore Jasper.

## The Blue Jay.

Curiosity is largely developed in birds. The blue jay is the most curious as well as the most voluble of all birds. I have been able to differentiate twentythree distinct utterances in the language, if I may use the word of the jay. On one occasion I left a glass jar containing newts on a large block of sandstone in my front yard. I had not been long there before a jay flew down to examine it. One of the newts made a quick motion, and uttering a cry of surprise the jay flew to a tree overhead. He remained quiet for an instant, as if in profound thought. He then uttered his assembly call, and birds of all kinds came hurriedly flying up in answer to it. In a few moments I noticed in the surrounding trees, jay-birds, woodpeckers, sap-suckers, cat-birds, song-sparrows, orioles, mocking-birds, black-birds, peewees and flickers. They made a terrible outcry, but soon became silent, when the jay, which had called them together, flew down to the rock. Several of his most courageous brethren immediately followed him. He went up to the jar and made a careful examination of it and its contents, all the while uttering a low, querulous monologue. Suddenly he attered three loud, peenliar cries and flew away. The assembly then dispersed. On another occasion I noticed a jay sitting silent and absorbed on the roof tree of a grape arbor. He appeared to be watching something beneath him very intently. On focusing him in my glasses, I discovered that he was in a state of great excitement, and
was trembling all over. I noticed the direction of his gaze, and soon saw the object of his regard. A large male cat was stalking a hare, and was just crouching to make his spring. He sprang at the hare, but his jump fell short, and the hare bounded away in safety. And then the jay-bird seemed to be fairly overcome with delight. He trounced himself up and down, screaming with sarcastic laughter. He seemed to be jeering and ridiculing the cat to his fullest extent, and the cat seemed to understand him. He dropped his tail and disappeared in the bushes. The jay uttered one last note of derision and then flew away.

JAS. Weir, Jr., M. D.
For the Review.]
Drawing in the Public schools
Ozias Dodge, Head MasterVictoria Art School, Halifax CHAPTER IV.
The Ellipee and Regular Curves.
The ellipse in all of its forms is shown in many utensils of daily use. The cup and saacer which we have selected for this lesson, give it from'different positions, in a variety of forms. To draw an ellipse from a set copy is but a geometrical diagram, and is not only difficult, but is uninteresting to the pupils. It is quite another matter when that ellipse is sketched in connection with the other parts of a cup which is before them. In the latter case they are representing the appearance of an actual object, the roundness

of which is shown by the symmetry of the ellipse. The pupils instead of being confronted by a diagrammatical truth, find that truth exemplified in an actual object which excites their interest, gives a more lasting impression, and teaches them to draw,

For the first lesson lef the cup and sancer be placed below the level of the eyes, so that all may see into it a little distance. The teacher going to the board, draws first a perpendicular line of indefinite length ( $a b$ Fig 1.) telling the class that the objects are to
be built up equally upon each side of this. line. Draw across this at right angles the line $c d$, saying that the top is to be sketched equally upon each side of this. Set off upon $a b$ the space 1,2 , and you have determined the size (the drawings upon the board should be two or three times the size of the objects). Mark off upon $c d$ the width of the top of the cup, estimating the proportion of this distance to the space 1,2 , and then draw the lines for the sides of the cup.
Next sketch in the ellipse for the top; (the tendency in the class will be to make this too wide). Now mark off upon $a b$ the point where the rim of the saucer cuts the cup hiding its lower portion. Draw e $f$ upon either side of which the ellipse of the saucer is to be sketched, which will be a little wider than that of the cup. The proportion of the space 1, 3 , to 3,2 , should be carefully estimated, for it shows the depth of the saucer as well as the portion of the cup which is visible.

Mark off upon of the width of the sancer, estimating the distance it extends beyond the cup. Sketch in the ellipse of the sancer the part that is hidden by the cup as well as that which is visible, that the ellipse may be perfect, the two sides meeting; complete the saucer, and erasing the invisible lines, we have the objects in outline. The shading should be simple with a few lines following the form as in Fig 1.


Fic. 2.
The tendency of the class will be to make the ellipses pointed at the ends. This, in a measure, may be overcome if the pupil starts with the ends, making them well rounded, and then sketches the sides of the ellipses, building them up equally upon either side of the straight line. Should the cup have a handle it is best to turn it in such a way that it will not appear in the first lesson. After they have had some practice, it may be turned into sight and drawn.

For the second lesson, place the cap and saucer upon the teacher's desk, above the level of the eyes and show them that the great difference which this
makes is that now only one-half of the ellipses are seen, that they no longer see into the cup and saucer, and that the cup appears to rest deeper in the saucer (see Fig 2). A little talk upon the perppective of curves may here be given with great valug with a practical demonstration of raising and lowering the objects. An ellipse is simply a circle in perspective. Fig 2 is drawn upon the board in pretty much the


## Fio 3

same way as Fig 1, drawing first the line $a b$ and crossing it at right angles with the line $c d$. Next setting off upon $a b$ the space 1,3 , thus deciding upon the size, then mark the width of the cup upon $c d$ and start the sides. Sketch next the surving top above the line $c d$, making it a part of a perfect ellipse by sketching lightly the invisible part below the line; (see dotted line Fig. 2). Mark upon a $b$ the point where the line of the saucer crosses and draw the line ef as in Fig. 2. Sketch the ellipse of the saucer and complete the lower part. Shade as in Fig. 2 following the curve of the ellipses.

For the third lesson, which is the most difficult, place the cup upon its side in the saucer, and the whole below the level of the eyes as in Fig. 3. Draw $a b$, marking upon it the width of the saucer. Sketch the ellipse. Across $a b$ draw the line $c d$, noting the angle it makes with $a \quad b$ and the distance from the side of the saucer. Next draw the line 12 , and from the point where it cuts $c d$ draw 13 noting the angles these lines make with $a b$ These lines are of use in estimating the height of the cup above the saucer. Upon $c d$ mark the lowest point of the cup which in most cases will be invisible, and sketch the ellipse of the cup. Complete the lower portion of the saucer and add the sides of the cup. Shade as in Fig. 3, following the ontline of the objects.

Limited space forbids my going into detail in these lessons; but it will be seen, I think, that nearly all that is to be taught with regular curves is brought out in the drawing of the cup and saucer from different positions.- The most that I can hope to do in this way, is to give teachers the pith of the matter, leaving them to work it out in detail.

## For the Review.]

The Canadian Club of Harvard-A Good Word for our Schools and Colleges.
Drar Edttor- * * The Canadian Cluh was formed a year ago by British subjects attending Harvard University, and has been in active existence since its first formation. On account of the larger number of Canadians in attendance at Harvard, it changed its name from the Colonial Club to that of Canadian. There are at present fifty-nine Canadian and British students in the various departments of Harvard in active competition with 1,300 students. The Club meets once a month, and on the 24th of May honor the name of our beloved Queen by giving a Club Supper, which is one of the events looked forward to of university life. A review of the records of the Club reveals the fact, that the Canadians who has pagsed through this great institution of learning have left a record envied by many; and as graduation after graduation has taken place, the records of the Club are passed to others to hold up its high standing. It is the aim of every Canadian stadent to make a record here creditable to our Olab and to Canada. Most every member is a graduate of some of the Canadian colleges, and taking advanced work here. An evening spent with the Olab would soon convince the writer of the superior training that each has had; and this is on account of the splendid training that Canada gives in her pablic schools and colleges. So when their students enter a large university in competition with hundreds, they are all to take the lead as our Canadian Club members are doing in Harvard University. Among the members of the Canadian Club several have been selected to fill Professorships in Harvard and pther colleges of learning in Boston and elsewhere. Among the more recent that have been selected, are Prof. W. F. Ganong, in botany; Prof. A. E. Currie, in mineralogy; Prof. J. Daley, in dental surgery; Prof. W. B. McVey, in chemistry, College Physicians and Surgeons.

In a recent conversation with Professor Ashley of Harvard Cullege, the subject of Canadian preliminary education was discussed. He said that it was a mistaken idea to think that the Harvard Arts Course was any better than that of the smaller Oanadian colleges. It was much more expensive and could not be any better. As Prof. Ashley is a metriber of Harvard Senate, the opinion is of weight.
Nova Scotia and P. E. Island supply the larger part of the Canadian Clab membership, with Upper Canada and the North West. Although from widely seattered Provinces, and strangers, after the first meeting of the Club when the college year begins, an active and energetic secretary gathers them into the fold of
the Oanadian Club. Their friendship is then the truest, and seem to cheer up the students and buoy them up in the hard studies in which they are engaged.

Canada.
Boston, Mass., December 1898.
For the Revisw. 1

## The Teacher.

When I was about to take up the duties of a teacher for the first time, a teacher by nature and experience said to me: "Don't get bossy." At the time I did not see the significance of the advice and almost thought it uncalled for. After having taught for one year I became conscions of the fact that I was fast becoming a "schoolma'am," in all that word, in modern asage, implies. I was each term becoming more domineering and less gentle.
Just to-day, I asked a little girl who her teacher was, she replied, "Miss L-C, I like her, she is not cross." She spoke as if it was a very unusual thing for a teacher not to be cross.
Is this true? If so the pupils are to be pitied, but much more so the teacher; but has she not twenty things a day to make her so? True, every teacher has at times reasons for righteons indignation, but crossness is a fault which never leans to virtue's side. Do I as a teacher never become cross? Much to my dismay and disgust of self I do; but
" We may rise on stepping stones
Of our dead selves, to better things,"
How can a young woman teach in a public school and maintain a gentle and lovable disposition? How can she be free from that which pupils with so much aversion term "crossness"? In the first place she can bear in mind that smiles are powerfal and that it is neither criminal nor a waste of "sweetness on the desert air" to smile in the school-room. We are almost certain to receive impressions from anything on which we allow our thoughts or words to dwell. Let the teacher then dwell on the pleasant things which occur every day.

Do pleasant things occur every day in the schoolroom? Oh jes, if we open our eyes wide enough to see them and our hearts to appreciate them. "We are apt to view our troubles with both ejes and our blessings with only one."
The Bible tells us to think on "Whatsoever things are pure, lovely and of good report." Teachers who. have tried, and apparently in vain, to appeal to the nobler nature of their pupils, have been led to exclaim, "They have not a nobler nature." But let us "be noble, and the nobleness which in other men lies sleeping but never dead will rise in majesty to meet our own."

But what is the use of this moral suasion? Will it not do to

> " Ram it in, cram it in, Whąt are teachers paid for? "

It will, if our object is to make things. But no; we want to produce a man, a woman, in all the words include. It is pitiable that in modern usage these words have lost so much of their true significance. Do we teachers realize the force of iufluence? Tennyson says:-" I am a part of all that I have met." Do we not become part of our pupils? Yes, every day we leave some impress on their characters, engraft some thought in them which will mature in years to come.

Oh, that our every thought and action may be reflections from above, so that we may be indeed teachers taught by the Great Master.

## A Reply. <br> To the Editor of The Educational Review of the Maritime Provinces.

## Dear Sir-

It is, we suppose, an unusual thing to reply to a book review, and if we were to follow, our inclination we should certainly not do so. However, the criticism of our little French Reader which you published in your November number is so misleading that we feel obliged to ask you for a little space for a rectification.

Our reader is called "a fairly got up and fairly priated fifty cents book." This is more than unjust. For the price, its finish is unique among French readers in the Canadian and American markets. It might be called a fairly got up serenty-five cents book.
Furthermore, our book is declared to have no raison d'etre. Now, there is no other reader published which contains the same combination of elements: which offers our Canadian population, calling for a practical course in French, the same practical features: commercial correspondence, questions in the French language, passages specially prepared for retranslation, etc. Indeed it is only necessary to give due prominence to those qualities which F. W. S. in brief language, strongly contrasted with the prolixity of his fault-finding passages, himself admits to disprove his statement at the head of this paragraph. But there is more to be said. No man can point to a book which contains similar "questions on the text," questions as simple, practical and answerable, or show an instance where "retranslation" and "parallel passages " are found in conjunction with extracts in other respects satisfactory. We ransacked the catalogues of all the great publishing houses and examined their readers before deciding to make one of our own. We failed to find what was wanted in this
country, and if any man knows where a book like ours can be obtained at the price, we should like him to tell us where it is
F. W.S. wants grammatical notes. This is perfectly lawful. They have their value, especially in institutions where French is treated like a dead language. We preferred to leave them to the teacher and can no more be censured for this omission than a kitchen gardener for not growing orchids. The translations we give are not "bad notes," for not only do they remove the obstacles which block the pupil's path in the preparation of his lesson, but they show bim how an idomatic passage must be treated-not rendered literally but put into the best English which does not depart from the idea. This is what they were intended to do, and I confess I think our Canadian boys and girls had better acquire facility in translation than a knowledge of the niceties o! the subjunctive. -
F. W. S. makes four charges of incorreotness. Now on page 45 "que, not translated" is a perfectly sufficient direction for the pupil. On page 102 F . W. S. prefers the words "exempt from the chance of" for hors d'insulte. Nobody could certainly drag any other meaning out of our expression taken in connection with the context; on page 11 on, it is true, is not said of any particular person, but is most emphatically intended to bit the person addressed and may therefore be freely rendered by you. On page 109, dame de grande qualite is incorrectly translated we admit, since it refers to rank. To this discovery and to the enumeration of some words which (some of which only) might be included under the dnevitably vague term of " exceptional in pronunciation" does the entire criticism reduce itself. It is perhaps allowable to add that these defects just hdmitted are confined to a small part of the book (although found on different pages) which the absence of one of the editors in Earope and the temporary ill-health of the other, prevented from receiving as much supervision as the rest, and that, expressly on that account a very small edition was issued which will permit of a review almost as soon as introduced.

We think, sir, that a useful book, the first part of which has received the emphatic approval of the teaching profession in the Province of Quebec, deserves better treatment than that which F. W. S. has given it. That must beour apology for troubling you.
H. H. Curtis,
L. R. Gregor.

Montreal, November 2uth, 1 n93.
I taught, partly because I heard it was a good route to the presidency, and partly because I needed money. It was fortunate that I did not need much.

## The New and the Old Way Around the World.

When on the twentieth of September, 1519, the intrepid Magellan left the port of San Lucar in Spain, to sail into the unknown, his fleet comprised five ships, not one of which would in our day be thought fit for a coasting vessel. All the ships were of very small tonnage; one the "Trinidad," of 130 tons, Magellan himself sailed on; another, the "San Antonio," was about as large; then there were the Vittoria" and the " Concepcion," each of 90 tons, and finally the "Santiago" of 60 tons. These were boats with three or four masts, manned altogether by 260 men. The tonnage of the entire fleet amounted to 485 tons, while a single transatlantic steamer of the kind which carries across the ocean the touriats of the C. P. R., is of 13,000 toAs, or twenty-six times more than Magellan's entire fleet. Consider, moreover, the condition in which Magellan's ships were when he started on his voyage. Alvarez said of them: "I would not like to risk myself in one of them to go as far as the Canary Islands." And, notwithstanding, three years and fourteen days afterwards, one of the captains of the expedition, Sebastian de Cano, returned to San Lucar, though with but one ship and seventeen men.

Now, we reckon a little voyage, not by years or months, but by days. Get one of the trip tickets of the Canadian Pacific R. R. Co., and embark at Liverpool on one of the steamers of the Allan Line-which to be sure, cannot be compared to luxury with the boats which run between Queenstown and New York -and in seven days and a half you are in Quebec. You take there a river steamboat to Montreal. Then you enter one of the magnificent cars of the C. P. R., and are transported to Vancouver, 2,535 miles further west, with surroundings of comfort absolutely unknown on our European railways. You arrive at Vancouver at fifteen o'clock (the Company reckon time there by the twenty-four hours) and you have just time enough to go on board the hage white steamer lying at the wharf. On this fast vessel, provided with every luxury, you reach Yokohama in ten days, and three days after you are at Shanghai. Here you leave the steamer of the C.P.R. to embark on one of the vessels of the P. and O. On the boats of this company you return to England by the way of Singapore, Colombo, Aden, and Suez.

Here is the itinerary in a few words: Liverpool to Montreal, 2,799 miles; Montreal to Vancouver, 2,535; Vancouver to Yokohama, 4,283; Yokohama to Shanghai, 1,047; Shanghai to Hongkong, 810; Hongkong to Colombo, 3,096; Colombo to Port Said, 3,488; and Fort Said to London, 3,215. These figures make a total of 21,273 marine miles. Thus you pass seven
days and a half on a transatlantic steamer, five days and a half on a railway, twenty-two days on the C . P . R. steamer, thirty more on the P. and 0 . boat, and the tour of the world is made.

For those who are more pressed for time, it is a very simple thing to go from Liverpool or Queenstown to New York and take the railway to Montreal. By that you gain a day. Then, on the return voyage, you can leave the P. and $\mathbf{O}$, steamer at Brindisi, and take the mail train across France and the Pas de Calais, by which yon gain eight days. Altogether, then, it requires bat sixty-five days to make the circuit of the globe. It is true that the journey is not taken at the equator, and that you are cheated out of 327 miles, but nevertheless the traveller ought to be content.-Goldthnaile's Geographical Magaznne.

## सped Arithmetic.

The Baltimore News of August 20th revives the complaint against the excessive importance aitached to the study of arithmetic in the public schools, and in most schools. It says: "If one will visit the country-and perhaps those of the cities-in Maryland or any other state, he will be surprised, if not frightened, to find how much more about arithmetic the youngest pupils know than the casual visitor is likely to know. It is astonishing that such small heads can carry all those youngsters know about eight men digging a trench five feet wide in ten days, while it takes thirteen men working four hours a day to mine a ton of coal in a week. * * * From the day they leave school until they die, nine-tenths of the children thus trained have little use for any arithmetic more advanced than simple proportion and interest." It questions the claim that "arithmetic is such a splendid mental exercise. It teaches the children how to reason, to calculate quickly and with accuracy, and smartens them up all over in a way that no other branch of study can do;" and says of the star scholars in arithmetic, "that it will be found almost invariably that when definite figures are not before them, supported by the rules and the experience begotten of having done exactly the same sort of sum a thousand times, they manifest very feeble reasoning powers." President Eliot of Harvard, has declared his opinion that " arithmetic is the least useful of all the branches taught in the public schools." Another consideration which we have not seen urged, is the gross injustice done to children who have no aptitude for figures when they are set back and graded down in every other study because they lack proficiency in this particular. - N. $Y$. Churchman.

## A Willow at Grand Pre

The fitful rustle of the sea-green leaves
Tells of, the homeward tide, and the free-blown air
Upturns thy gleaming leafage like a share, -
A silvery foam, thy bosom, as it hesves .
O slender fronds, pale as a moonbeam weaves,
Some grief through you is telling unaware:
O, peasant tree, the regal tide doth bare,
Like thee, its breast to ebbs and floods,--and grieves !
Willow of Normandy, say, do the birds
Of motherland plain in thy sea chant low,
Or voice of those who brought thee in the ships
To tidal vales of Acadia, or words
Heavy with heart-ache whence sad Gaspereau
Bore on its flood the fleet with iron lips?
-T. H. Rand, in Canadian Magazine.

## About some Nova Scotia Boys.

We find the following in the "Boys' Corner" of the Young Men's Era, Chicago, (Y. M. C. A. Organ). The formation of this Boys' Branch should be imitated in other localities, and teachers may help along such a good work:
The "corner" is just what we want for the boys. It will introduce them to each other and bring them before the association more prominently I would like to tell the boys of North America something abont our Boys' Branch in Amherst. In our town which has a population of only 4,000, we have a branch of ninety-three members, and a finer lot of boys you will not find anywhere. We hold weekly prayer-meetings for them on Friday evenings, the average attendance at these meetings being forty-two. We have a debating club which meets every Mooday evening; last week the boys discussed the respective merits of " S wiss Family Robinson" and " Robinson Crusoe." After a lively time Crusoe got the better of it.
The boys have also a philatelic club, and at the meetings of this club they have an interesting time over their stamps.
We also have a first rate foot-ball team in our branch and the boys take a great interest in the game; they play the English Rugby, fifteen men on a team Not long ago we gave the boys a social; about ninety-five were present and they had a real good time. A number of the boys are going to bank the house and cut some wood for a poor woman who lives outside the town this week.

I think I have told you enough about the boys for the present, I would like to see something about the boys of other towns and cities.-W. T. M. MacKinnon.

One of the most useful qualities in a teacher's mental furnishing is resolution. On the threshold of this new school year we suggest that you write over your school-room door these words of Napoleon's : "If you set out to take Vienna, take Vienna.-Inter-Mountain Educator.

## QUESTION DEPARTMENT.

Page 166, Section 1 , Question 3
With A anc $B$ running cisterns is filled in 4 hours. With $C$ running out and $A$ in. cistern is filled in 40 hrs . With B running in and C out, cistern is flled in 60 hrs.
Then part of cistern filled by $A+B$ in 1 hour $=\frac{1}{1}$

$$
\begin{array}{lllll}
" & . & C-B & " & =\frac{1}{8} \\
" . & . & B-1 & " & =\frac{1}{6}
\end{array}
$$

$$
A+B=1
$$

$$
-A+C=\frac{1}{6}
$$

Part filled by $B+C=11$ in 1 hour.

$$
\begin{aligned}
& \mathrm{B}-\mathrm{C}=8 \\
& 2 \mathrm{~B}=18=3 \\
& \mathrm{~B}=14+2=8
\end{aligned}
$$

B alone fills cistern in $\%$ hrs $=69$ hrs. Part filled by $\mathrm{A}+\mathrm{B}=\frac{1}{6}$

$$
\because \quad \text { " } \quad \mathrm{A}=1-4_{6}^{3}=4
$$

$$
\text { Ans. }\left\{\begin{array}{l}
64 \mathrm{hrs} . \\
9 \frac{1}{3} \mathrm{H}
\end{array}\right.
$$

Enquirer.-The process of silk manufacture is too long and too technical to be given here.
E. D.-1. How is "been" pronounced by the best speakers. 2. Why are there ex-senators when senators are appointed for life P

1. The weight of authority is in favor of the shortened form as in "bin."
2. .Senators may be removed for corrupt practices ; they may resign to run for the House of Commons, or they may be appointed to other offices, as in the case of the late Lieutenant Governor Boyd.

A Subscriber. - Would you kindly tell me in the Revisw the origin of the word "Fitz," as applied to surnames I I know it means "s son of," but a further meaning, which I think it has, I cannot verify.
Its use in England seems to be also of the illegitimate sons of kings and princes; as Fitzroy, the son of the king, Fitzclarence, son of the Duke of Clarence.

## SCHOOL AND COLLEGE

Mr. R. B. Wallace has been appointed principal of the Superior School at Milford, St. John County
Mr. F. W. Sprague, A. B., has been appointed head master of the Shediac Grammar School.

Miss Clara E Bridges has resigned in St. Stephen to accept a position in the Model school. Fredericton; she was succeeded by Miss Phillips.

The Semi annual Conference of the Chief Superintendent of Education with the Inspectors took place in Fredericton, January 5th. All the Inspectors were present.

Mr J. G. A. Belyea, A. B., has been appointed principal of the Petitcodiac superior School.
It is unlikely that any local licenses will be granted this terin for any section of the province.

The annual meeting of the' Executive of the Provincial Teachers' Institute was held in the education office, Fredericton, on the evening of January 5th. It was decided to hold an Institute in St. John on the last three teaching days in June, 1-94. A programme was arranged.

Inspector Carter proposes to make his visits in the following order, for the present term: January and part of February, the country districts on the mainland of Charlotte Co.; the remainder of February and part of March, country districts in St John County. Westield, and Greenwich, Kings County; the last part of March, April, and first part of May, City of it John. South and West; the remainder of May, St. Stephen, St. Andrews, Millown; June, the Islands of Charlotte County.
Principal McLeod of Summerside was the recipient of flatteriug addresses and valuable presents from his associate teacbers and pupils on his severing his connection with the Summerside Schools of which he has been principal for fifteen years. By the retirement of Mr. McLeod, P. E. Island loses one of its best and ablest teqchers.

The many friends of Acadia will be pleased to leard that all the institutions associated with the name show/a marked increase in educational efficiency and the numbet of students attending. Acadia Seminary, with an almot new, and as usual, thoroughly competent staff of teachers, cannot fail in accomplishing the object of its founders. Horton Academy has made much progress along all lines during the principal hip of Prof. Oakes. This school commends itself to all, not only on account of its own excellence as an educational instiution, but also on account of its value as a supporter of Acrilia University. The latter institution is not less modern than sister colleges A recent innovation, and one which has long been needed, is an Optional Course of Study. The aim of this course is to allow the student a good field for choice of subjects, and at the same time, thoroughly qualify him for the degree of B A.-Hantre Journal.
Mr. Landregon of Miscouche, P. E. I., has been appointed principal of Kensington School, vice W. D. McIntyre, who goes to Summerside. and Mr. O'Donnell of Summerside succeeds Mr Landregon as principal of Miscouche School.
Summerside, P. E. I., schools re-opened after Christmas holidays with a considerably changed teaching staff. W. D. McIntyre, late Principal of Kensington School, succeeds Principal McLeod, resigned. Mr. B. Trainor, Emerald, succeeds Mr. O'Donnell, resigned. Miss Norton of Comer's Commercial College, Boston, takes charge of the newly organized class of stenography and typewriting.

Mr. A. C M. Lawson, recently of the Superior School, Havelock, Kings County, N. B., has taken charge of the Superior School. Hopewell Hill, Albert County. Mr. Lawson is an experienced and energetic teacher, and the village to which he has gone is to be congratulated on securing his services.

## B00K REVIEWS.

The Dread Voyage, and other poems, by Wm. Wilfred Campbell; pp. 190. Price 81.00 . This Cakada of Ours, and other poems, by J. D. Edgar, M. P.; pp. 64. Price 75 cents. Publishers, Wm. Briggs, Toronto. Both these volumes are brought out in such a neat and attractive style as to leave nothing to be desired in that direction. We sincerely hope that the patriotic enterprise and excellent workmanship displayed in the bringing out of these and other volumes by the same publisher may bring in material rewards to him. The volumes of Mr. Edgar directly appeal to the patriotic sentiment, and the versification of most of them being in the ballad style they should become popular. Mr. Campbell has become widely known already by his first volume of Lake Lyrics, and this second volume, recently published. will make the poet better known and more widely appreciated. He po-gesses the true poetic instinct, and, like the true poet, What he has accomplished begets a confidence in his powers that aims at a loftier flight in the second attempt. The poems "The Mother," "Unabsolved," and otherein this second volume are powerful in conception and materly in style.

Patriotic Riccitations and arbor Day Exercises, by Hon. Geo. W. Ross, LL. D., Minister of Education, Ontario; pp. 374. Price \$1.00. Publishers, Warwick Bros. \& Rutter, Toronto. Hon. Mr. Ross has conferred a boon on the teachers and school children of Canada by the publication of this volume, which should have a circulation from the Atlantic to the Pacific. The first part of the volume contains suggestions for preparing the pupils to observe our national holidays, with directions for teaching the principles of local and general government. Then follows a selection of patriotic pieces-Canadian and general. The Canadian selections of prose and poetry breathe a genuine Canadian spirit and are of high literary merit.

Popular Science, edited and annotated, Jy Jules Luguieus, Ph. D., Professor of Modern Languages in Yale University; pp. 252. Publishers, Ginn \& Co., Boston, Mass. This is a series of easy scientific articles in French prose, valuable for imparting the habit of careful reading and for gaining a vocabulary of scientific literature.

Crorro pro Milone, edited with introduction and notes by F. B. Colson, M. A., Head Master of Plymouth College, England; pp. 136. Price 2s. 6d. Publishers, MacMillan \& Co., London and New York. This is a very satisfactory text-book, with copious introduction and valuable notes. It has an advantage, too, in having no vocabulary, encouraging the student to consult the Latin dictionary for himself.

Thucypides, Book VII, edited by E. O. Marchant, M. A., Professor of Greek and Ancient History in Queen's College, London; pp. 256. Price 3s. 6d. Publishers, MacMillan \& Co.; London and New York. This book, with its introduction, notes, marginal explanations and vocabulary will be of great service to the advanced student. Its clearly printed pages and orderly arrangement are creditable to the publishers.

Hand-book of Public Health and Demography, by Edward F. Willoughby, M. D., London ; pp. 509. Price 4s. 6d. Publishers, MacMillan © Co., London and New York. This is an exceedingly valuable compendium on health and how to preserve it. The first chapter deals with the health of the man, his proper diet, clothing, habits, exercise, rest, etc. - The second chapter is devoted to the health of the bouse, how it should be built, aired, warmed, lighted and its general sanitary arrangements. The third chapter, on the health of the city, deals with water supply, disposal of refuse, etc. Chapter fourth is on preventible disease, school hygiene and health of the work-shop, while the three remaining chapters are upon vital statistics, meteorology and sanitary law. If such a book were to be found in every housetold it would promote bealth and consequently happiness.

Inorganic Chemistry for Beginners, by Sit Heary Roscoe, assisted by Joseph Lunt. B. Sc.; pp. 245. Price 2s. 6d. Publishers, MacMillan \& Co., London and New York. This work, containing over one hundred illustra. tions of apparatus and experiments, is admirably adapted for beginners in this fascinating science. There is much omitted that is found in ordinary lessons on non-metallic elements, but the amount of detail given in this book more than compensates the omissions and makes it very useful to the teacher.

The Breinner's Greek Composition, based mainly upon Xenophon's Anabasis, Book I, by Collar \& Daniell, pp. 201 ; price 95 cents. Publishers, Ginn \& Co., Boston. Teachers of Greek will welcome this little work, because the exercises in composition are based upon this text-book which is introduced to the students first, and upon grammatical principles which proceed from the easy to the more difficult. The book is neatly printed and orderly in arrangement.

Laboratory Guide in General Chemisthy, by Geo. W. Benton, A. M.; pp. 163. Price 40 cents. Publishers, D. C. Heath \& Co., Boston. Mass. This handy little volume contains detailed instructions for the successful performance of over one bundred and fifty experiments in general inorganic chemistry, and useful tables of references for teacher and pupils. Every teacher of chemistry will find in it a valuable assistant.

Livy, Books XXI and XXII, edited with introduction and notes by Prof. J. B. Greenough and Prof. Tracy Peck; pp. xiv +252 . Price 60 cents. Publishers, Ginn \& Co., Boston, Mass. These books are probably the most interesting of the historian Livy to the English student, because they recount the struggle between Rome and Carthage. The needs of the learner are recognized throughout the texta fitting introduction, clear type, helpful notes on each page.

Casar's Galinc War, edited by Prof. C. M. Lowe, Ph. D., and Prof. J. T. Ewing, M. A.; pp. 543. Albert Scott \& Co., publishers, Chicago. This is an edition of the seven books of Cæsar's Gallic War. In completeness, textural
filmsh, abundance of illustrations and notes, it leaves nothing to be wished for. In addition it contains a life of Cansar, the geograply of ciaul and a description of its peoplew(with maps), history of the millitary art as practised by the Romans, with historical and grammatical notes, forming a work that no teacher of Cawar's commentaries should be without. Accompanying this is a text edition for use in the class room, without notes or rocabulary.

## BOOKS RECEIVED.

Ohmet l.pasonsann How to Give Trike. First and Second series, in two volumes. 1) (C. Heath dt Co., pubishers, Boston. Westward Ho' by Chas Kingsley, abridged for sehools. Publishers. MarMillan A Co. London and New York.
Tar Sathes of Dryben Edited with memoir. Introdue tion and notes by J (Collins Publisherm. MacMilland Co. London and New York

## The Military Magazines

In the Century Ex. President Harrison has an article on Military Instruction in Schools and Colleges
In St. Nicholaq, "How Paper Money is Made," will interest many teachers.
To teachers and to those interested in the great question of education, the artucles in the Athantic Monthly on "Samuel Chapman Armstrong " and "The Transmisaion of Learning through the "niversity" will most appeal.
Mr. W. T. Stead, the distinguished London editor, has been in America for some weeks, a part of which time has been spent in Canada. Mr. Stead has long been a warm friend of Lord and Lady Aberdeen, and his recent sojourn at Ottawa as the guest of the Governor General has resulted in a very readable and complete character sketch of Lord Aberdeen and his accomplished wife, which appears in the January number of the Revice of Reviene

Last summer Edward Bok, the editor of The Ladies' Home Journal, the Philadelphia magazine of marvelous editorial acumen and circulation, visited Canada. Previous to this visit, Mr. Bok had written much and well of Canadian writers, but his personal visit gave him a new idea of Canada's literary people and their talents. He became interested in Canadian authors and literary matters, and the first indication of this was the announcement that he had secured Lady Aberdeen to write for his magazine. Then it was given out that the first prize in the Journals musical series offered for the best waltz had been awarded to Mrs. Francis J. Mocre, of London. Ontario. This waltz Mr. Bok has named "The Aberdeen Waltzes," in honor of Lady A berdeen, and will be printed in its entirety in the February issue.
The Canadian Magazine for January is an excellent number. Its opening article, "Howe and his Times," by Attorney General Longley, gives many amusing incidents about Nova Scotia's public men of a generation ago. Chancellor Rand, of McMaster University, publishes for the first time one of the most extraordinary paychological experiences on record.

Goldthraite's Geographical Magazine, (Oct -Dec. 1893), contains a fine array of geographical articles, which are extremely interesting and instructive to teachers and students.

